A Dissertation on

"A DESCRIPTIVE STUDY of GENERALIZED ANXIETY DISORDER, SOCIAL ANXIETY DISORDER AND DEPRESSION IN INDIVIDUALS WITH ALCOHOL DEPENDENCE PRESENTING TO A TERTIARY CARE PSYCHIATRY CENTRE"

Submitted to

THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY

In partial fulfilment of the requirements

For the award of degree of

M.D. (PSYCHIATRY)

(Branch-XVIII)

GOVERNMENT STANLEY MEDICAL COLLEGE & HOSPITAL
THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,
CHENNAI, TAMILNADU.

APRIL 2016

CERTIFICATE

This is to certify that this dissertation titled **"A DESCRIPTIVE STUDY of GENERALIZED ANXIETY DISORDER, SOCIAL ANXIETY DISORDER AND DEPRESSION IN INDIVIDUALS WITH ALCOHOL DEPENDENCE PRESENTING TO A TERTIARY CARE PSYCHIATRY CENTRE"** submitted by **Dr.S.MANIKANDAN** to the faculty of PSYCHIATRY, The Tamil Nadu Dr. M.G.R. Medical University, Chennai, inpartial fulfillment of the requirements in the award of degree of M.D. (PSYCHIATRY)Branch -XVIII for the April 2016 examination is a bona-fide research work carried out by her during the period of Feb 2015 to July 2015 at Government Stanley Medical College & Hospital, Chennai, under our direct supervision and guidance of **Prof. Dr.R.SARAVANA JOTHI M.D**, Associate Professor, Department of Psychiatry at Stanley Medical College, Chennai.

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DECLARATION

I, Dr.S.MANIKANDAN solemnly declare that the dissertation **"A DESCRIPTIVE STUDY of GENERALIZED ANXIETY DISORDER, SOCIAL ANXIETY DISORDER AND DEPRESSION IN INDIVIDUALS WITH ALCOHOL DEPENDENCE PRESENTING TO A TERTIARY CARE PSYCHIATRY CENTRE"** is a bonafide work done by me during the period of Feb 2015 to July 2015 at Government Stanley Medical College and Hospital, under the expert supervision of **Prof. Dr.R.SARAVANA JOTHI M.D,** Associate Professor, Department Of Psychiatry, Government Stanley Medical College, Chennai. This thesis is submitted to The Tamil Nadu Dr .M.G.R. in partial fulfillment of the rules and regulations for the M.D. degree examinations in Psychiatry to be held in April 2016.

Chennai-1 **Dr.S.MANIKANDAN**

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INSTITUTIONAL ETHICAL COMMITTEE, STANLEY MEDICAL COLLEGE, CHENNAI-1

Title of the Work : A Descriptive study of generalized anxietydisorder, social anxiety and depression in individuals with Alcohol dependence presenting to a tertiary care psychiatry centre.

Principal Investigator : Dr. S Manikandan

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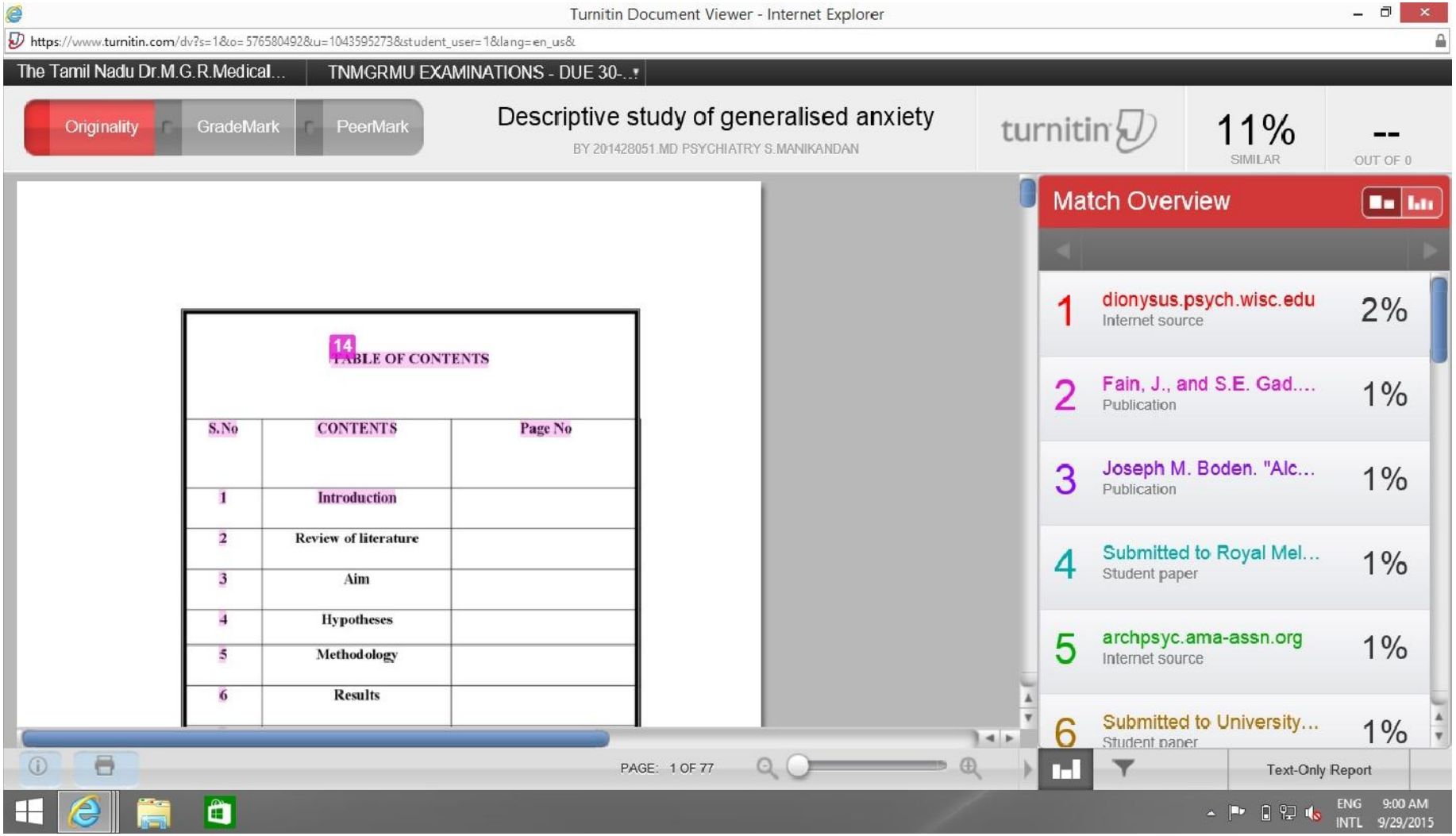
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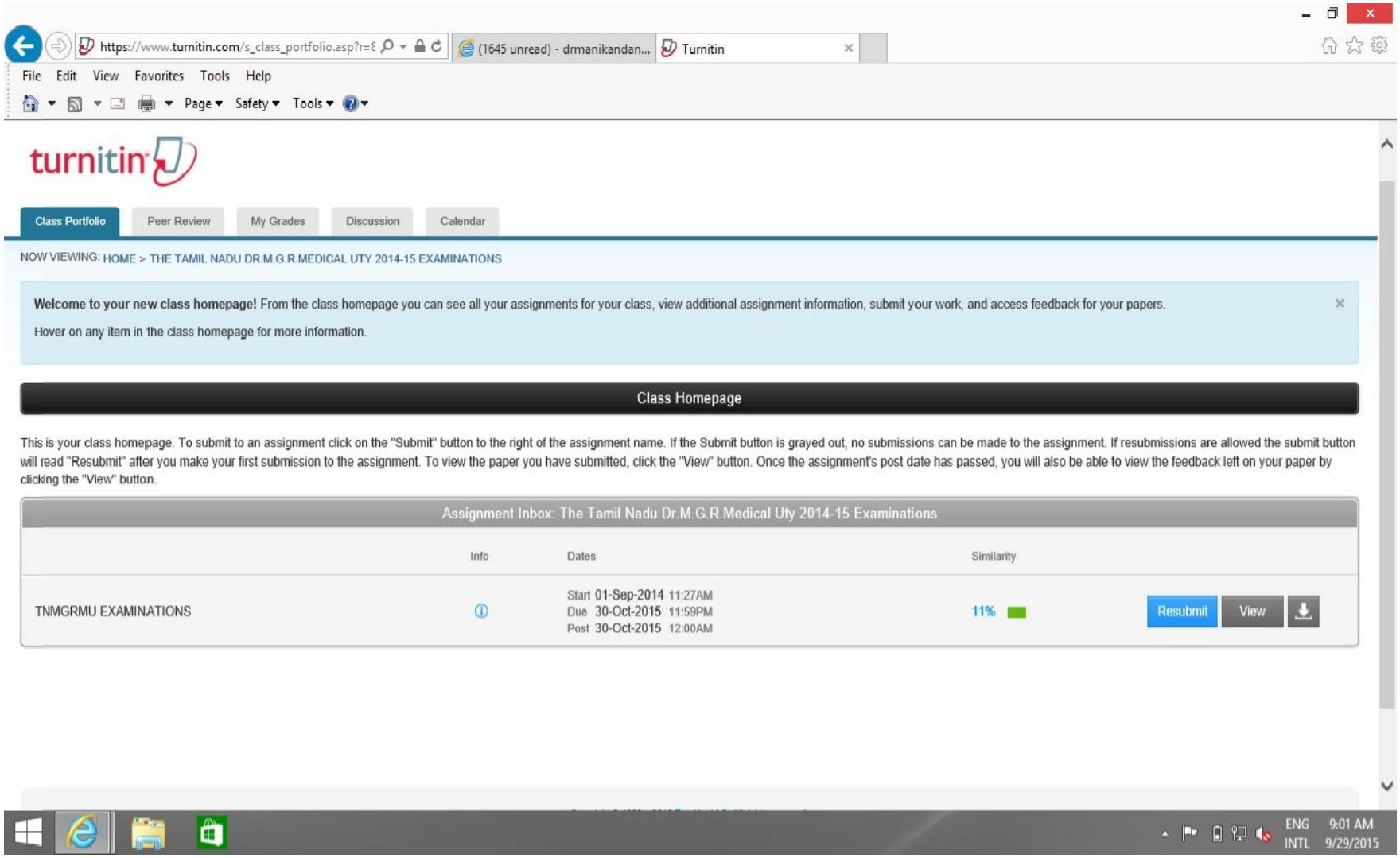
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INTRODUCTION

INTRODUCTION

Alcoholism

Alcoholism is a very serious problem in our community. Over sixty medical conditions are directly or indirectly attributed to the use of alcohol. Alcoholism is reported to cause 3.5% of the global death and disability.

[i].High incidence of crime is also linked to problematic alcohol use[ii]. Alcohol consumption cause increased risk of mortality from several types of cancers, heart disease, and liver cirrhosis[iii].

According to Lancet's Global Disease Burden study, 2010, 4.9 million deaths and 5.5% of the total DALYs lost worldwide is linked to problematic alcohol usage. WHO Global Status Report on alcohol and health, 2014 attributes 3.3 million deaths annually to increased alcohol dependence. It is one of the major reasons for the deaths in the productive age groups of 15-49[iv].

Alcoholism in India

About one third of population in India suffers below the poverty line because of the extensive consumption of alcohol[v]. A number of studies demonstrate certain facts relevant to the Indian subcontinent. The use of alcohol by laborers in factories and industries is related to absenteeism, alcohol related sickness, personal problems, interpersonal issues and inadequate employee engagement. 15 to 20% of work place sickness and

40% of the accidents are directly or indirectly caused by alcoholism[vi]. There is noticeable physical, mental and social deterioration. There is a total breakdown in the relationship with the management in advanced cases. 23% of road accidents, 15 to 20% of traumatic brain injuries[vii], 17.6% of psychiatric emergencies in India and various cases of domestic violence are believed to be caused by alcohol dependence[viii].

Recent trends in alcohol consumption are alarming, as the average age of first drink has come down from 28 years to 17 years between 1980 and 2007. This places 30% of Indians in alcohol consumption with 4-13% of daily consumption leading to more than 50% of the people in this category becoming hazardous drinkers[ix].

Depression and alcohol use

Raimo and Schuckit, 1998 say that almost 80% of problematic alcohol consumers report depressive symptoms of which 30% present with major depressive disorder[x]. This also acts as a hindrance in the process of treatment. The user may avoid treatment due to depression. Depression and alcohol use reinforces the vicious cycle of number of seamlessly integrated events in life; depression may stem from frustration, conflict or pressure, consequence of failure to meet our needs, failure to achieve goals, inability to meet expectations, loss of loved ones, prestige, guilty feeling due to mistakes, or personal limitations, etc. and this leads to alcohol consumption which further worsens the situation by increasing depressive symptoms in the consumer.

Anxiety disorders and alcoholism

There is a discrepancy between the number of alcohol dependents and the people who seek professional help[xi]. It is seen that hardly 10% of problematic alcohol users actually visit a clinic or hospital for treatment[xii]. The relationship between anxiety disorders and alcoholism is poorly established especially in the developing countries.

Co morbidity of anxiety disorders in alcohol deaddiction and its therapeutic implications

In the light of the above mentioned statistics, the problematic use of alcohol remains a challenge due to various reasons; it is spearheaded by the inaction on the part of the consumer to seek help in the early stages of the disease. This is compounded by the underestimation of the problem. The beneficial outcome is clearly skewed shown by the abstinence of around 50% at the follow up of 6 to 12 months[xiii]. Following treatment, it is depicted statistically that 90% of them have at least one episode of relapse in the 4-year follow up[xiv]. It may be hypothesized that these effects are partly or largely due to the cumulative effect of the co-morbidity of other disorders that has a telling impact on alcoholism and its treatment[xv]. Studies show that alcoholism treatment is poor in people with co morbid anxiety disorders[xvi]. There is an increased risk of relapse in alcoholics in people with severe trait anxiety that is present even after 3 weeks of abstinence, concurrent disorders of depression or anxiety or a combination of these[xvii].

Understanding the potential effects of co-morbid anxiety disorders in patients suffering from problematic alcohol use, it becomes an indicator of risk of relapse against a group of patients without these co-morbid conditions[xviii].

The presentation of co morbid disorders is not uncommon in tertiary care settings. This complex presentation has led to a lot of studies in the field of psychiatry. This is especially true when it comes to the study of generalized anxiety disorder, social anxiety disorder and depression in individuals with alcohol dependence. Previous studies show a relationship between anxiety disorders, depression and alcohol dependence. But inadequate data from the developing countries has dented the generalizability of the relationship and therefore hampering planning and policy making. This study is an effort to provide knowledge to the scientists, academicians and clinicians on the relationship between generalized anxiety disorder, social anxiety disorder and depression in individuals with alcohol dependence and thereby bridge the gap in the existing literature.

REVIEW OF LITERATURE

REVIEW OF LITERATURE

A systematic review of existing literature was done using established databases; Eric, PsycINFO, PubMed, and Google Scholar to examine previous studies to estimate the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence, to compare the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence, to assess the correlation between of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence and to study the socio demographic and clinical variables related of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

The preliminary findings of this review points out to a complex and bi-directional relationship between depression, anxiety, and alcohol use disorders[xix]. There is an interdependent relationship between anxiety and alcoholism which positively influences and interacts to the initiation, maintenance and the relapse of each other. It is mandatory to understand this complex relationship in its entirety to effect planning of the treatment and the delivery of the services.

Garber and Hollon in 1991 posit three factors to consider to see if an element is a potential risk factor in the research of psychopathology[xx].

1) The correlation studies should show a relationship between the vulnerability factor and the outcome.

2) A temporal association should be demonstrated by the factor

3) A third variable should not be present in the cause and effect relationship

DEPRESSION[xxi]:

Depression is classified as mild, moderate or severe depending on the symptoms of low mood, low energy, increased fatigability, low activity and loss of interest. Other symptoms include) Guilty feelings and worthlessness, Self – harm or suicidal thoughts, Sleep disturbances, Negative view about the future, Decreased self – esteem and self – confidence, Decreased attention and concentration and Lack of appetite. This should be persistent for at least 2 weeks hampering the normal functioning of the individual. The prevalence of depression is seen alone or it can co-occur with other disorders. It can be a part of a spectrum of disorders called bipolar disorders.

Depression is a state of mental illness that makes a person feel worried about him, does not feel right towards others, and is unable to meet the demands of life. There are several signs that indicate poor mental health; always worrying, unable to concentrate because of unrecognized reasons, continually unhappy without justifiable cause, easy lose of temper and often,

regular insomnia, wide mood swings, continuously dislike to be with people, upset if the routine life is disturbed.

Anxiety

Anxiety is the most common psychiatry symptom in clinical practice. Anxiety disorder are one of the commonest psychiatry disorder in the general population. This response is coupled with somatic symptoms, hyperactivity of the autonomous nervous system and other psychosomatic symptoms. Anxiety disorder is usually divided into Generalised anxiety disorder, Phobic disorder include Agoraphobia ,social phobia-social anxiety disorder, panic disorder and other anxiety disorder[xxii].

Generalized anxiety disorder[xxiii]

Generalized anxiety disorder (GAD) is reported commonly in private practice among the common population with a prevalence of 1.6% to 5.0% in the general population while 2.8% to 8.5% of the patients reporting to the clinic show GAD. Depression has been widely studied whereas anxiety disorders have not got enough weightage. The number of scales available for anxiety is considerable low as compared to depression.

Alcoholism

An dependent is the one who is either physically or psychologically dependent on alcohol or drugs for his survival and encounter serious

problems in health, social and family life. In spite of these problems, the person still continues to take the drug or consume alcohol.

Physical dependence is that the body of the person gets accustomed to the use of the drug in such a way that their routine life becomes dependent on it and would experience withdrawal symptoms if he stops using it. Psychological dependence is that the person keeps on thinking about the drug in such a way that his thoughts are predominantly filled with ideas of how, when and where he can have the next dope or drink. Psychological dependence person become nervous, anxious, and restless, if he didn't take the substance, & get relieved of above symptom, after taking the substance.

Alcoholism and drug dependence is a very serious problem in our community. With more number of people resorting to social drinking, they slowly make room for themselves among chronic users of alcohol and other drugs. This later manifest itself as dependence[xxiv].

Co-morbidity in anxiety and alcoholism: The probable etiology

The mechanism by which anxiety disorders and alcoholism are related are given by three mechanisms[xxvxxvi]. The first mechanism posits that there is a causal relationship between the two with one problem leading to another. This is different from the second mechanism that postulates an indirect causal relationship where a presence of a third confounding variable alters the outcome of these disorders.

The final mechanism proposed states that no relationship exists between these disorders. In order to explain the co-occurrence of these disorders, three mechanisms have been proposed;

1) Presence of a third variable to demonstrate the co-occurrence of these disorders called as the common factor model.

2) The concept of self-medication where the people use alcohol to get rid of anxiety

3) The idea of substance induced where the use of alcohol positively influences anxiety and the incidence of disorders of anxiety.

Genetic factors as a cause for co-morbidity is seen in the common factor model. Family and twin studies support this claim[xxvii]. Alcohol use disorders and disorders of anxiety are linked to the phenomenon of sensitivity to anxiety[xxviii],[xxix]. Steward and Conrad in 2008 affirm the co existence of genetic factors and sensitivity to anxiety in a causal chain to elaborate a personality based on genetics which increases the vulnerability to co morbidity of anxiety and alcohol use[xxx].

The clinical and academic studies concentrate more on the self-medication pathway which proposes that people with anxiety disorders, in order to relieve of the symptoms, consume alcohol which is instrumental in the development of alcohol use disorders. Other models of alcoholism by Quitkin et al (1972)[xxxi] on self medication, Conger et al (1999)[xxxii] on tension

reduction and Sher (1987)[xxxiii] on stress dampening models also supports this idea. People with phobias tend to exhibit this behavior more (50-97%). In 2008, Kushner et al found in their systematic review that 75% of the people with co morbid disorders develop anxiety disorders[xxxiv].

Hans-Ulrich Wittchen, PhD; Shanyang Zhao, PhD; Ronald C. Kessler, PhD; William W. Eaton, PhD in 1994 conducted a study on DSM-III-R Generalized Anxiety Disorder in the noninstitutionalized civilian population of the United States aged 15 to 54 years. Generalized anxiety disorder (1.6%) was found to affect 5.1% of the US population, twice as common among women as among men. Significant correlates of GAD were assessed using multivariate logistic regression analysis which revealed that age>24 years, marital status and occupation were significant[xxxv].

Robert L. Spitzer, MD; Kurt Kroenke, MD; Janet B. W. Williams, DSW; Bernd Löwe, MD, PhD in 2006 developed a brief self-report scale to identify probable cases of GAD. It is a 7-item scale with good reliability, as criterion, construct, factorial, and procedural validity. Sensitivity and specificity were 89% and 82%. GAD and depression were counted as separate dimensions though they occurred together[xxxvi].

A study by Grant BF et al in 2005 among 43093 samples in the US addressed the prevalence, correlates, co-morbidity and disability of DSM-IV generalized anxiety disorder (GAD) and other psychiatric disorders in a large national survey of the general population, the National Institute on Alcohol

Abuse and Alcoholism's (NIAAA) National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) showed a lifetime prevalence of GAD at 4.1% and 12-month prevalence at 2.1% with no difference in comorbidity than other Axis I and Axis II disorders. GAD was much higher in people with substance use disorders. They concluded that GAD individually contributes to disability and impairment[xxxvii].

Sami P. Pirkola , Erkki Isometsä, Jaana Suvisaari, Hillevi Aro, Matti Joukamaa, Kari Poikolainen, Seppo Koskinen, Arpo Aromaa, Jouko K. Lönnqvist in 2005 published results from the Health 2000 Study of a sample of 6005 cases of age>30 in adult population revealed 6.5%, 4.5 % and 4.1% of Depressive-, alcohol use- and anxiety disorders respectively. This study showed the increase in comorbid disorders in alcohol use with men having disorders more than females (7.3 % vs. 1.4 %) while women had more depressive disorders (8.3 % vs. 4.6 %)[xxxviii].

Results from the National Epidemiologic Survey on Alcohol and Related Conditions in 2004 by Grant BF et al showed the Prevalence and Co-occurrence of Substance Use Disorders and Independent Mood and Anxiety Disorders. It stated 9.21% of independent mood and anxiety disorders in US population while substance use disorders were 9.35%. Significant and positive relationship between substance use and anxiety disorders was observed with $p<0.05$[xxxix].

This led to the postulation of independent development of anxiety

disorders and substance use whereas there is a positive and significant relationship during the later stages of the disease. The effect of this association is wide and large with a huge amount of personal and corporate losses. The literatures available with us do not substantially answer many questions on how they are exactly related. Qualitative studies are essential to explore more of these factors.

Donna M. Gilles, Cynthia L. Turk, David M. Frescoin 2006 showed Social anxiety, alcohol expectancies, and self-efficacy as predictors of heavy drinking in college students[xl].Burke and Stephens (1999) elaborated a social cognitive theory of heavy drinking which explains there is a relationship between anxiety and drinking[xli]. G. Terence Wilson, David Abrams in 1977 reported Effects of alcohol on social anxiety and physiological arousal[xlii].

Ronald C. Kessler, PhD; Rosa M. Crum, MD, MHS; Lynn A. Warner, MPP; Christopher B. Nelson, PhD, MPH; John Schulenberg, PhD; James C. Anthony, PhD in 1997 demonstrated the Lifetime Co-occurrence of DSM-III-R Alcohol Abuse and Dependence With Other Psychiatric Disorders in the National Comorbidity Survey with a positive but weak relationship[xliii].

Social phobia, Generalized anxiety disorder and depression

Social anxiety disorder also commonly known as social phobia is the successor in the list of common mental health disorders of depression and substance use[xliv]. It is defined as the intense distress in social situations[xlv].

These people experience panic like symptoms in the face of any social situation[xlvi]. These situations may range from simple activities like talking in front of others, using public places, eating with strangers to socializing in general[xlvii]. The underlying fear is in the irrational expectancy of being humiliated manifesting as palpitations, and signs of autonomic arousal like diaphoresis[xlviii]. These symptoms further reinforce the anxiety to these situations.

The diagnosis of social anxiety disorder according to DSM IV criteria is heralded by the presence of persistent marked fear in social situations. It is considered to be a disorder only if it hampers day to day functioning. The incidence of this disorder is typically seen in late childhood with the people seeking treatment in late youth.

Social anxiety disorder and alcoholism studies show that[xlixl]

1) There is a consistent co variation of the social anxiety disorder and alcohol use disorders.

2) There is a temporal association between social anxiety and alcohol dependence

3) There is a definite link between SAD and alcohol dependence as given by an association of SAD in the case of alcohol dependence after thirteen years.

The gap in literature

The following study aims to bridge the gap of previous studies to estimate the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence, to compare the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence, to assess the correlation between of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence and to study the socio demographic and clinical variables related of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

AIMS AND OBJECTIVES

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1. To estimate the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

2. To compare the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

3. To assess the correlation between of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

4. To study the socio demographic and clinical variables related of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

MATERIALS AND METHODS

MATERIALS AND METHODS

DESIGN:

Cross sectional, descriptive study.

SOURCE OF DATA:

The sample is drawn from patients attending the outpatients Psychiatry department at Government Stanley Hospital, Chennai with consecutive sampling from Outpatient department satisfying the selection criteria during the period of February to July 2015.

METHOD OF COLLECTION:

1. After obtaining informed consent from patients with alcohol dependence attending the Psychiatry OPD, they are interviewed and assessed using various scales. Data is recorded for this purpose.
2. Information is obtained from patient, reliable informant.
3. Socio demographic and medical details will be obtained using a questionnaire designed for this study.

DURATION AND PERIOD OF STUDY

6 months, from February to July 2015

MATERIALS

1. A semi structured Performa to collect the socio demographic details, family history details and a semi structured clinical profile.
2. Hamilton Anxiety Rating Scale (HAM-A)
3. Leibowitz Social Anxiety Scale
4. Beck's depression Inventory

INCLUSION CRITERIA

1. Consenting patients who fulfill criteria for alcohol dependence syndrome according to ICD – 10.
2. Age 20 to 50 years

EX CLUSION CRITERIA

1. Those who did not give their consent.
2. Previous history of psychosis.
3. Concomitant substance dependence other than alcohol.
4. Comorbid medical complication
5. Gross Cognitive impairment.

Hamilton Anxiety Rating Scale (HAM-A)

It is one of the most widely used scales by clinicians and researchers, comprising of 14-items, measuring somatic anxiety and psychic anxiety. It has few limitations like inability to discriminate between antidepressant and anxiolytic effects. There are no standardized questions for probing though there is an acceptable level of inter-rater reliability. The scale ranges from 0 to 4, which indicates mild severity< 17, mild to moderate 18-24, moderate to severe 25-30[li].

Leibowitz Social Anxiety Scale

It is a 24-item scale used for the assessment of social anxiety developed first (Greist*et al*. 1995)[lii] to evaluate interaction in social situations that people with phobia may avoid (Liebowitz, 1987)[liii]. The scale is divided into subscales of 11 and 13 items that assess social interaction and performance respectively. The scales are likert-type asking the patient to rate for the past week providing scores for 6 subscales namely avoidance of performance, avoidance of social performance, total fear, fear of performance, fear of social interaction and total avoidance.

Beck's depression Inventory

It is made up of 21 items which is a self-reported, developed in various forms (Beck, et al., 1961)[liv] . A shorter version called fast screen is also available (Beck, Steer & Brown, 1996)[lv]. It is used to measure the symptoms and

attitudes of depression. It has a mean internal consistency of 0.86 ranging from 0.73 to 0.92 (Beck, Steer, & Garbin, 1988)[lvi]. The alpha coefficients of BDI for psychiatric and non-psychiatric people are 0.86 and 0.81 correspondingly.

STATISTICALANALYSES:

Statistical analysis was done using computerized software (SPSS 20). Descriptive statistics like frequencies, percentages, means and standard deviations was computed. Chi square tests for independence, correlation tests and Mann Whitney U test was done for different variables and parameters.

FINDINGS

FINDINGS

The sample is drawn from patients attending the outpatient psychiatry department at Government Stanley Hospital, Chennai with consecutive sampling from outpatient satisfying the selection criteria during the period of February to July 2015. The participants were 150 males who satisfied the inclusion and exclusion criteria.

Socio-demographic characteristics:

The participants were above the age of 20 years. Twenty-five percent of the respondents were between the age of 26 to 30 years. Table 1 illustrates the distribution of age across different groups. A majority of the participants were Hindus (84.7%) [Diagram 1], studied middle school (34.7%) [Table 2], earning income less than 5000 rupees per month (73.3%) [Table 3], married (78%) [Table 4], semiskilled workers (62%) [Table 5], urban (91%) [Diagram 2], and 53.3% of them coming from joint families [Diagram 3].

AGE

TABLE 1: AGE DISTRIBUTION

Age	Frequency	Percent
20-25	12	8.0
26-30	37	24.7
31-35	33	22.0
36-40	29	19.3
41-45	21	14.0
46-50	18	12.0
Total	150	100.0

The above table describes the age distribution. The highest is 26-30 with a percentage of 24.7 followed by 31-35. The third highest is 36-40 hitting a percentage of 19.3.there is a minor difference between 41-45 and 46-50. The lowest is 20-25.

RELIGION

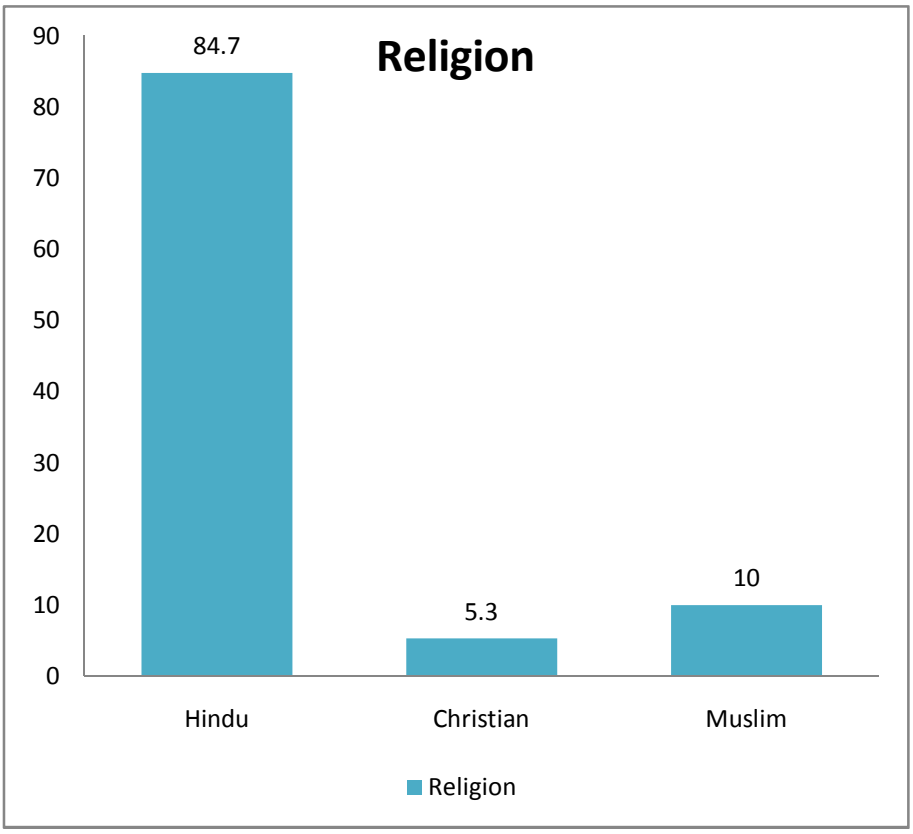

DIAGRAM 1: RELIGION

The above figure depicts religion. Hindu is the highest. It is then followed by Muslim and Christian each having a percentage of 10 and 5.3 respectively.

EDUCATION

TABLE 2: EDUCATION

Education	Frequency	Percent
Illiterate	17	11.3
Primary School	35	23.3
Middle school	52	34.7
High school	41	27.3
Undergraduate	4	2.7
Postgraduate	1	.7
Total	150	100.0

The table illustrates the education. Among the samples illiterate patients is 11.3 percent. 23.3 and 34.7 percent are primary school and middle school respectively which is followed by high school hitting a percentage of 27.3. The lowest is the undergraduate and postgraduate.

INCOME

TABLE 3: INCOME

Income	Frequency	Percent
<5000	110	73.3
5000-10000	39	26.0
>10000	1	.7
Total	150	100.0

The above table represents the income. 73.3 per cent samples earn less than 5000. 26 per cent earn between 5000 and 10000. Only 7 per cent earn more than 10000.

Marital Status

TABLE 4: MARITAL STATUS

Marital Status	Frequency	Percent
Married	117	78.0
Unmarried	32	21.3
Married-separated	1	.7
Total	150	100.0

The above table provides information about marital status. Most of the samples are married. Only 21.3 per cent is unmarried. The percentage of married-seperated is less with a percentage of 7.

OCCUPATION

TABLE 5: OCCUPATION

Occupation	Frequency	Percent
Unemployed	2	1.3
Unskilled worker	11	7.3
Semi-skilled worker	93	62.0
Skilled worker	32	21.3
Farmer	2	1.3
Clerical	3	2.0
Shop-owner	6	4.0
Professional	1	.7
Total	150	100.0

The table represents the occupation.62 per cent are semi-skilled workers. The second highest is skilled workers with 21.3 per cent. There is a minor difference between unskilled workers and professionals. The shop-owners and clerical have a percentage of 4 and 2 respectively. Farmers and unemployed share an equal percentage of 1.3.

DOMICILE

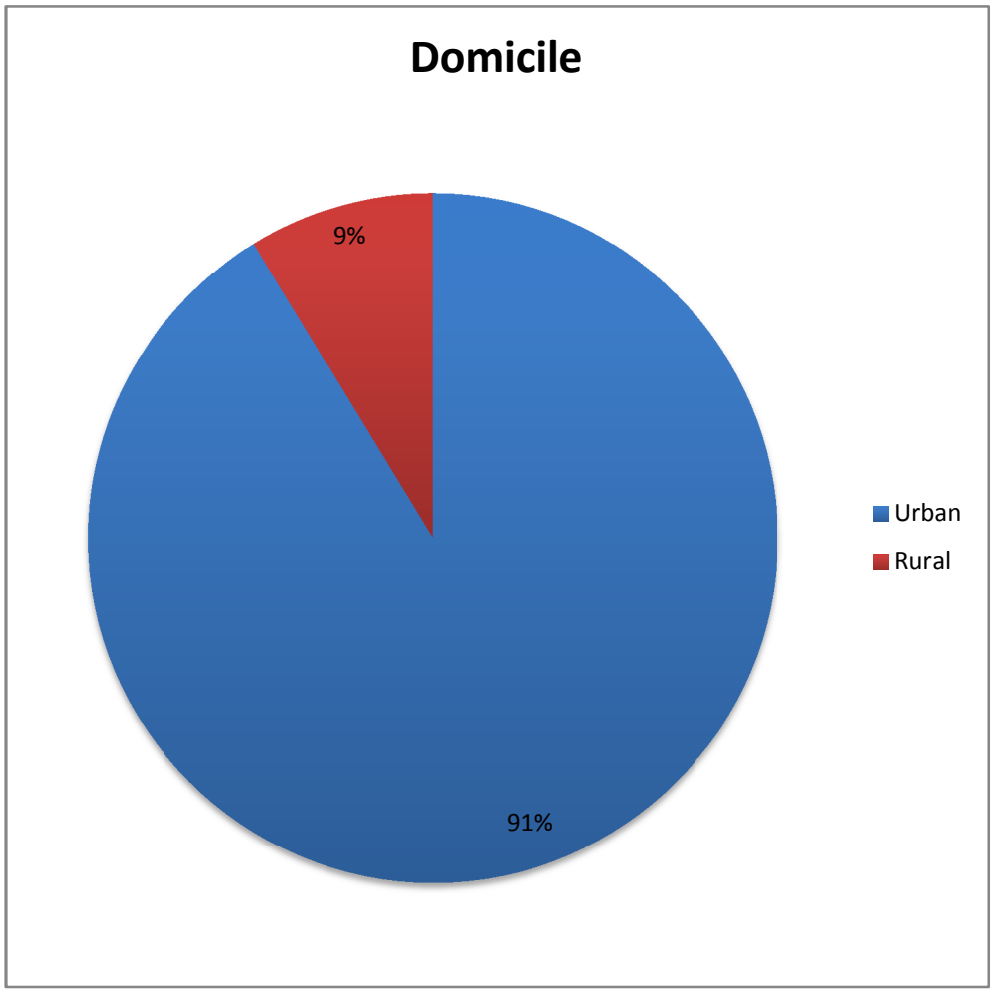

DIAGRAM 2: DOMICILE

The above pie chart explains the number of residence in rural and urban areas. Among the total samples 91 per cent is from urban and only nine per cent is from rural.

FAMILY TYPE

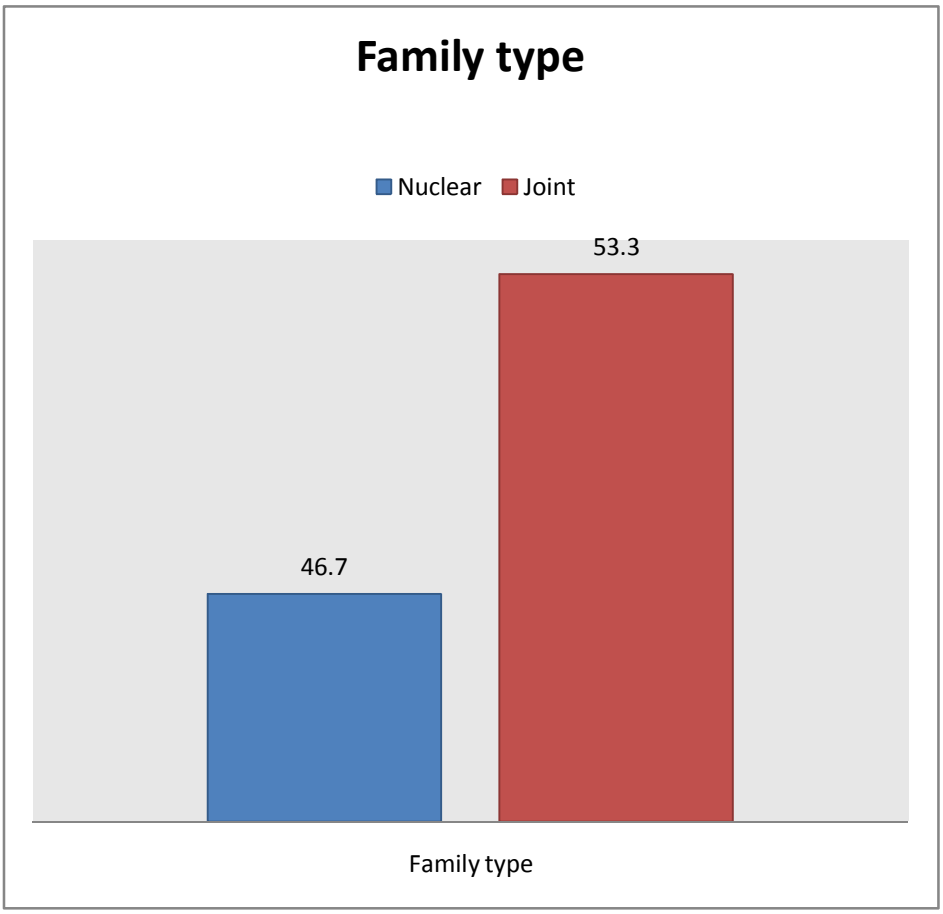

DIAGRAM 3: FAMILY TYPE

The above chart illustrates the family type. Among which 53.3 fall under joint and the rest under nuclear.

SOCIO-ECONOMIC STATUS

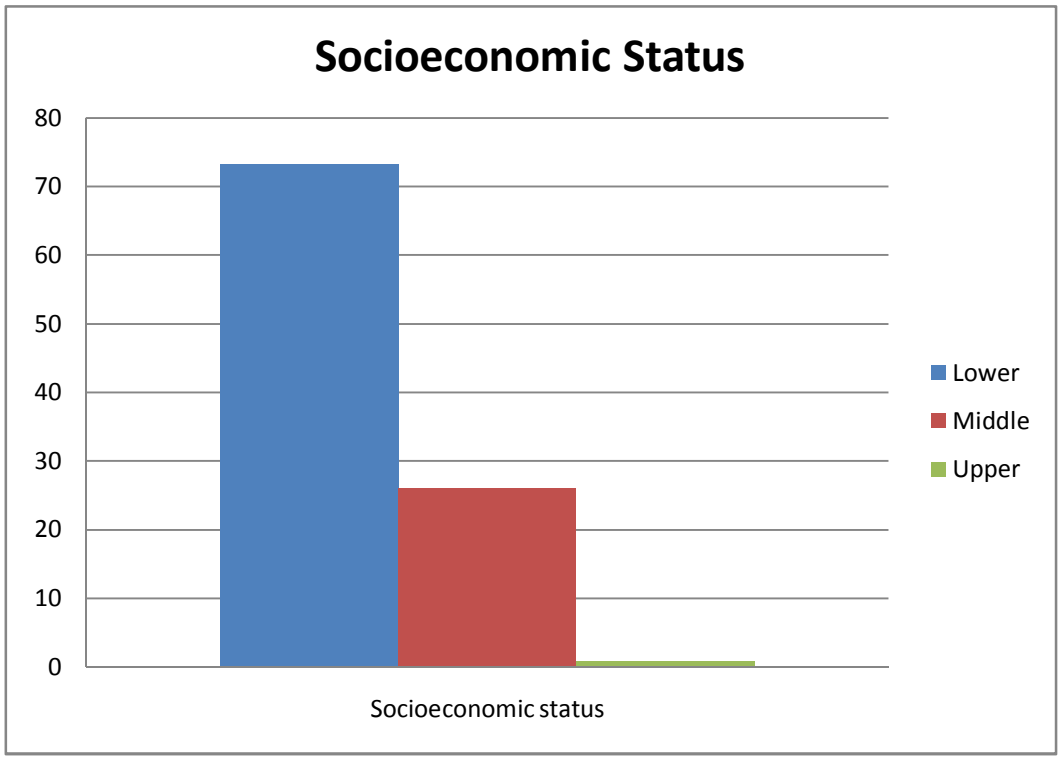

DIAGRAM 4: SOCIOECONOMIC STATUS

The above chart represents the socioeconomic status. There are more number of lower when compared to middle and upper. Upper is the least.

A majority of them come from the lower socio-economic status.

AGE OF FIRST DRINK AND DURATION OF ALCOHOL USE

TABLE 6: AGE OF FIRST DRINK AND DURATION OF ALCOHOL USE

		Age at First Drink	Duration Of Alcohol
N		150	150
Mean		21.29	13.70
Median		20.00	13.00
Mode		20	20
Std. Deviation		4.783	7.014
Range		29	28
Minimum		13	2
Maximum		42	30

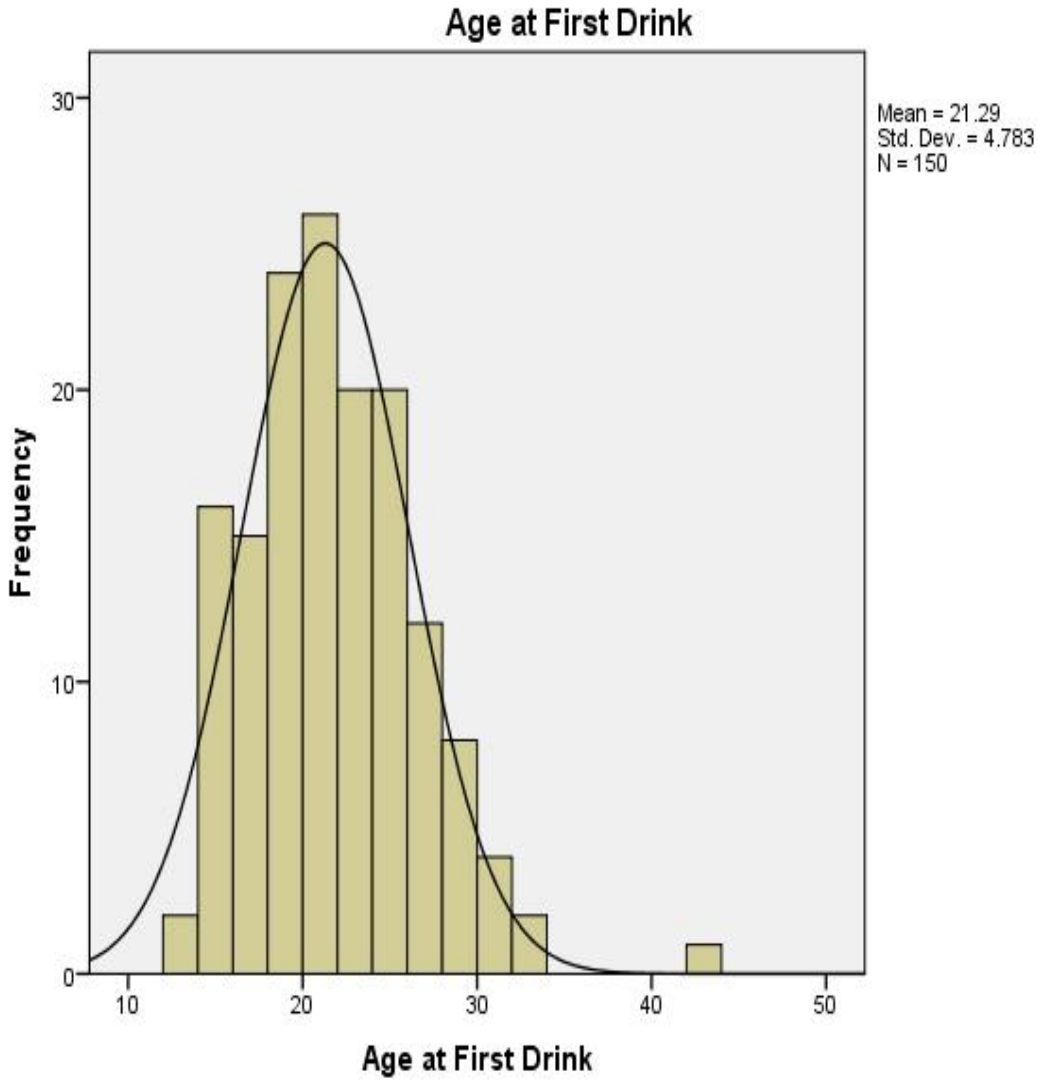

DIAGRAM 5: AGE AT FIRST DRINK

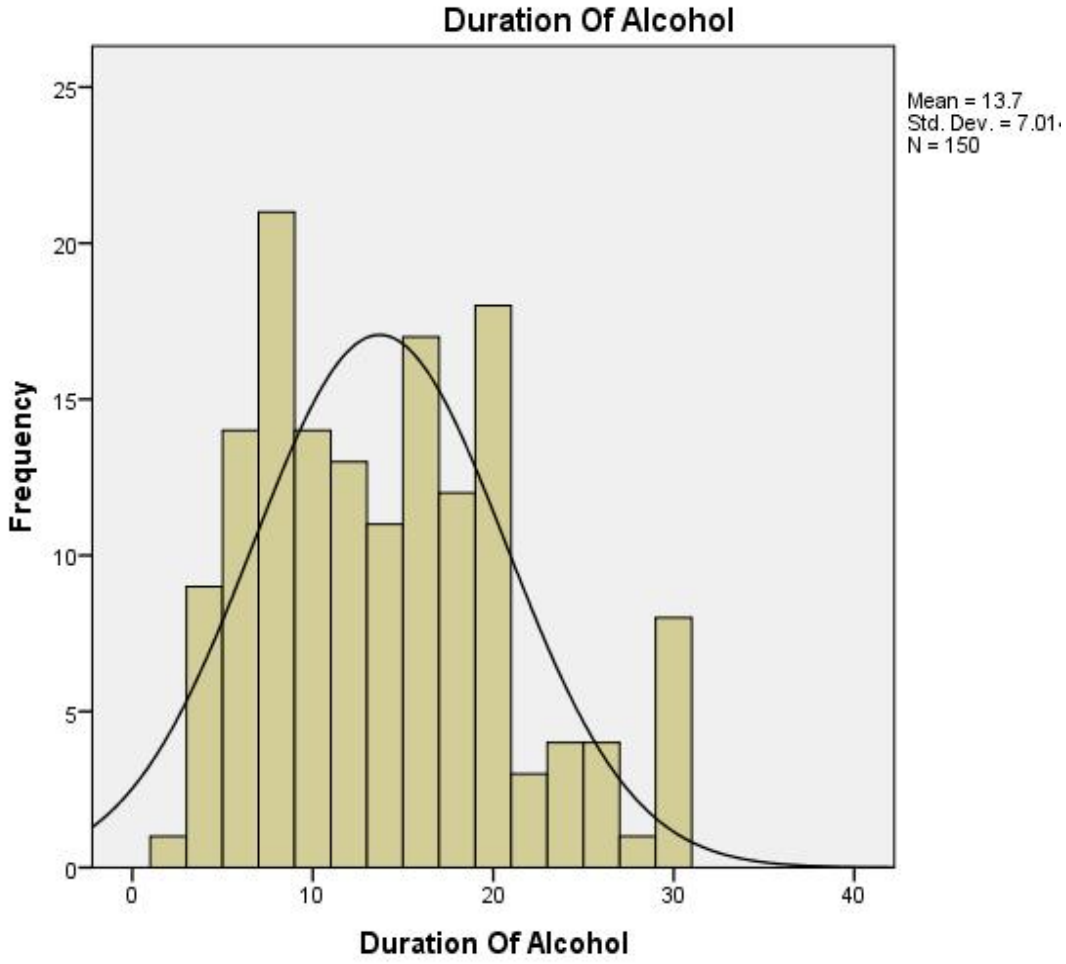

DIAGRAM 6: DURATION OF ALCOHOL USE

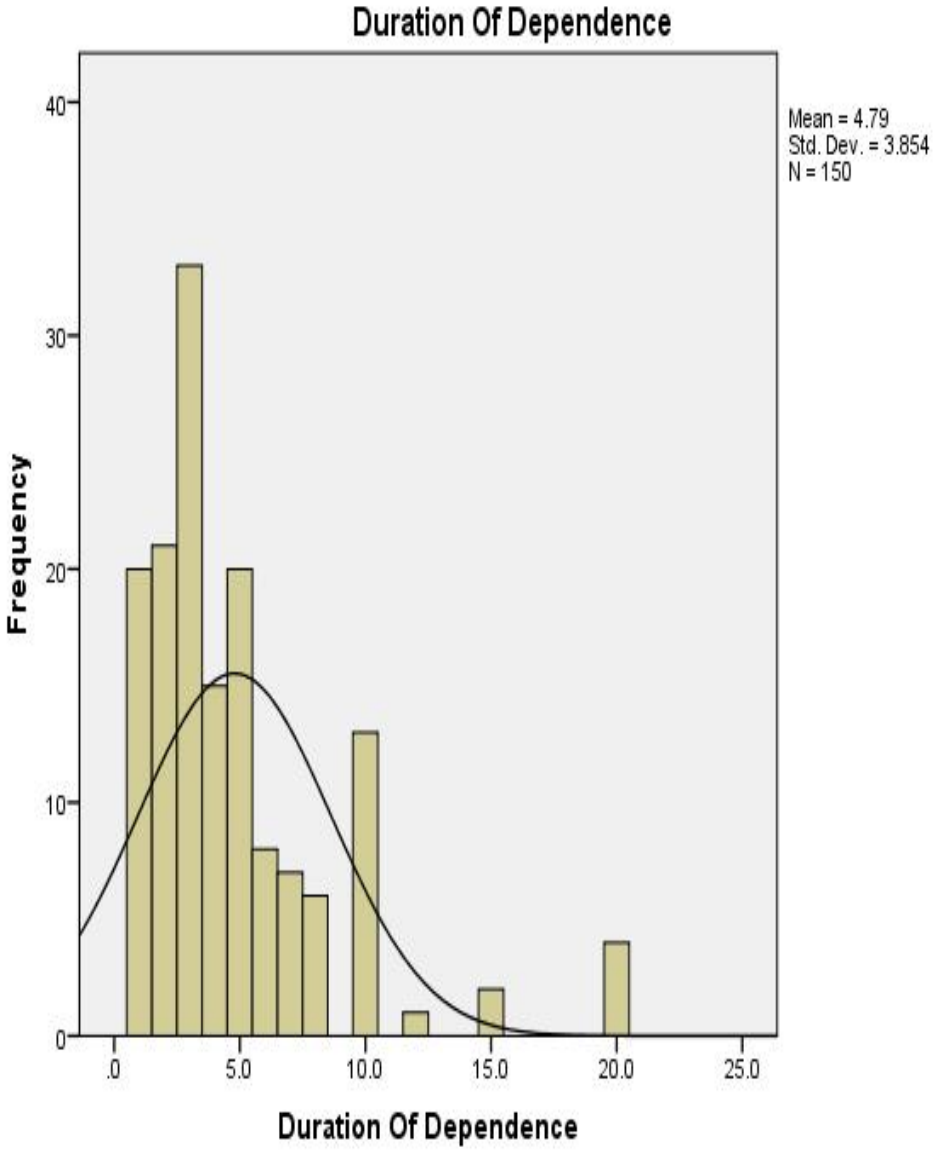

DIAGRAM 7: DURATION OF DEPENDENCE

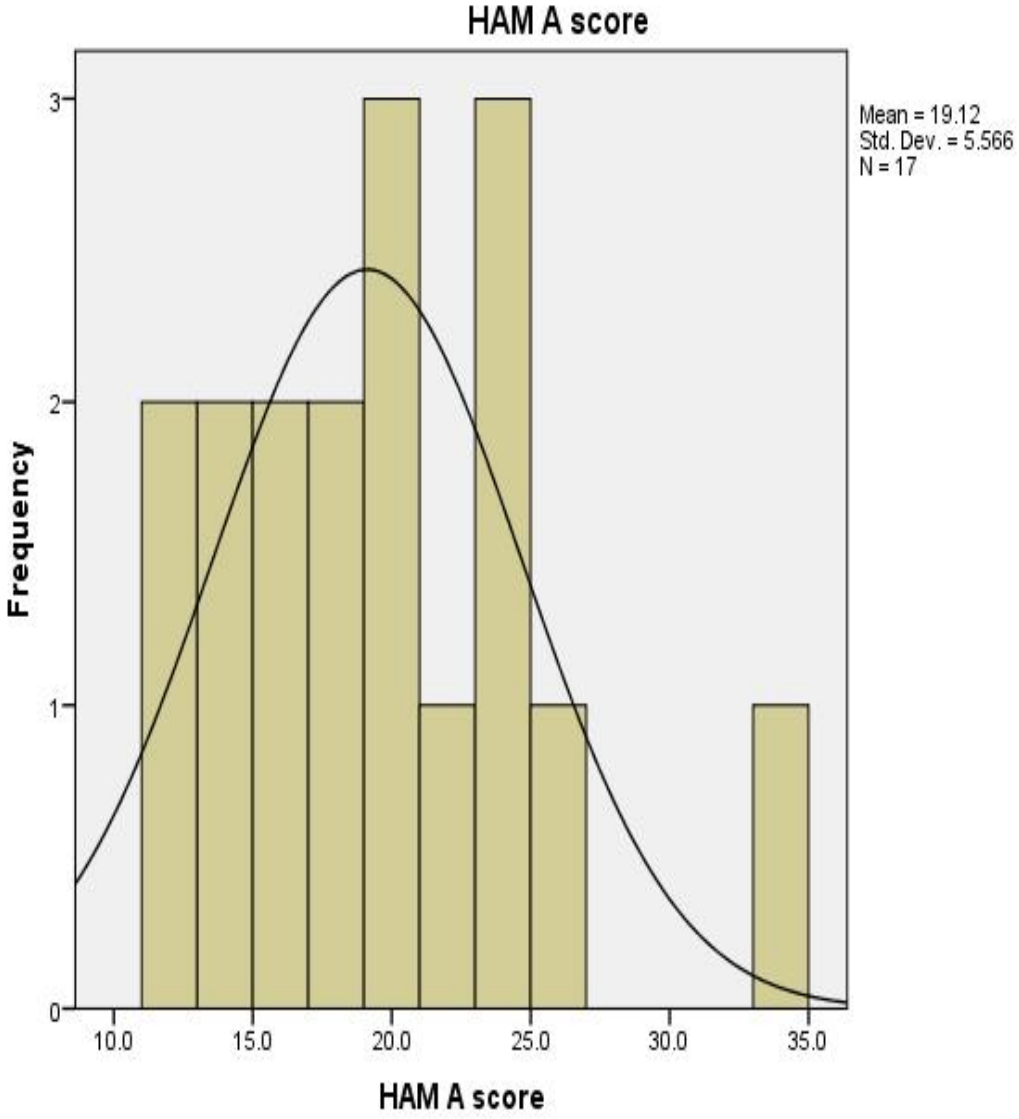

DIAGRAM 8: HAM-A SCORE

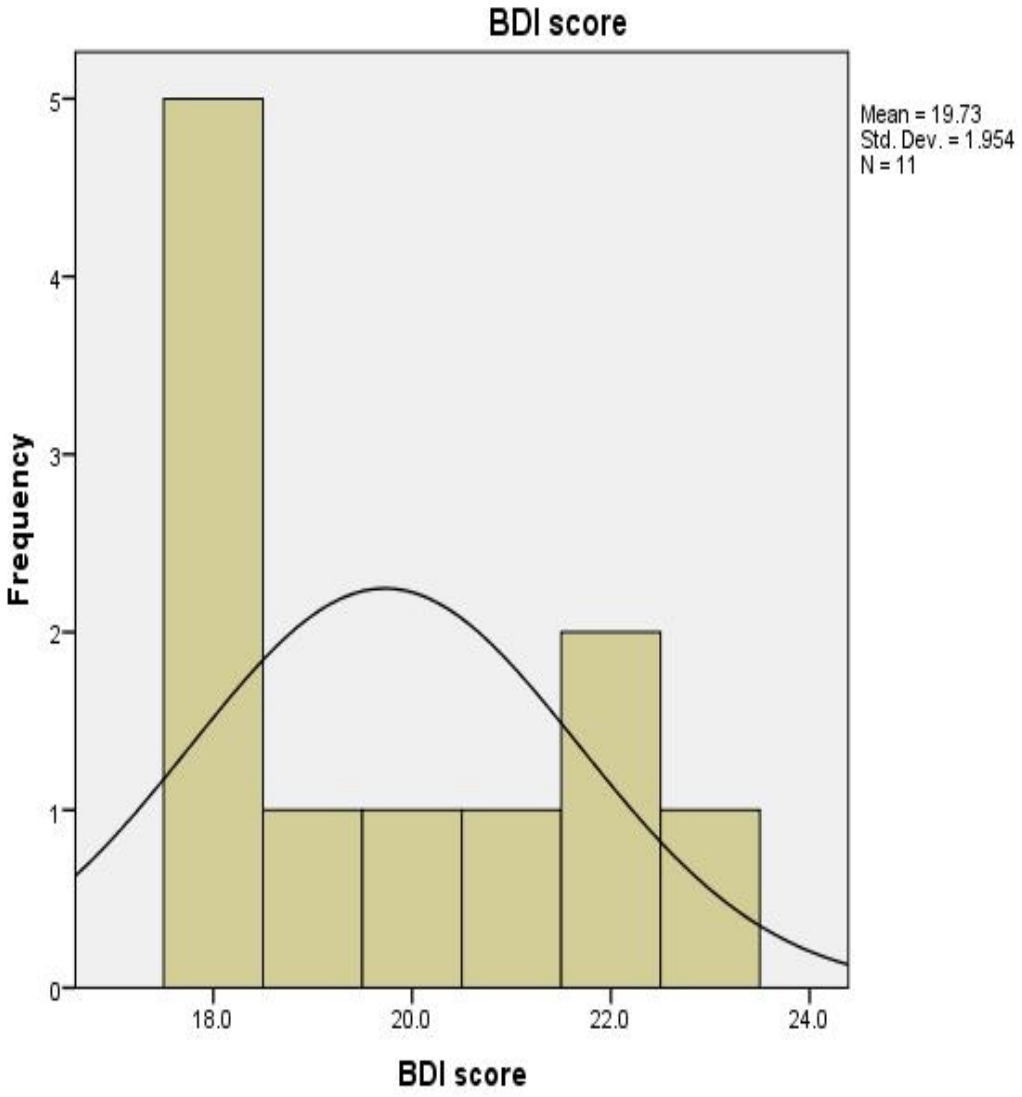

DIAGRAM 9: BDI SCORES

GENERALIZED ANXIETY

TABLE 7: GENERALIZED ANXIETY

	Frequency	Percent
Mild	7	4.7
Mild to moderate	8	5.3
Moderate to severe	2	1.3
Total	17	11.3
Total	150	100.0

The table represents generalized anxiety levels among the samples. Out of the total number of samples 4.7 per cent has mild, 5.3 per cent has mild to moderate and 1.3 per cent has moderate to severe levels of generalized anxiety.

TABLE 8: SOCIAL ANXIETY

LSAS scores	Frequency	Percent
Mild	1	0.7
Moderate	6	6.0
Severe	1	1.3
n	8	8.0
N	150	100.0

The table provides information about social anxiety levels. The moderate anxiety is seen in 6% of the cases.

DEPRESSION

TABLE 9: PREVALENCE OF DEPRESSION

BDI	Frequency	Percent
Mild	8	5.3
Moderate	5	3.3
Total	13	8.7
Total	150	100.0

The above table illustrates depression levels. 5.3 per cent samples are in the mild and 3.3 per cent are moderate.

CORRELATION TESTS BETWEEN VARIOUS VARIABLES

The following table 10 shows the results of correlation tests between various variables.

TABLE 10: CORRELATION TESTS

Variables	Pearson's correlation r	Significance p Correlation is significant at the 0.05 level (2-tailed)
Duration of alcohol and HAM-A	0.170	**0.04**
Age at First Drink and HAM-A	- 0.114	0.17
Age at First Drink and Libowitz SAD	-0.074	0.37
Age at First Drink and BDI	-0.028	0.73
Duration Of Alcohol and BDI	-0.037	0.66

The duration of alcohol use and anxiety has a positive correlation, which is statistically significant ($p<0.04$).

STATISTICAL TESTS-CORRELATION TESTS

TABLE 11: CORRELATION TESTS SHOW NO SIGNIFICANT CORRELATION BETWEEN ANY OF THE VARIABLES PRESENTED ABOVE.

Variable 1	Variable 2	**Pearson's correlation r**	**Significance p Correlation is significant at the 0.05 level (2-tailed)**
HAM A score	Duration Of Dependence	**0.070**	**0.79**
HAM A score	Age at First Drink	**-0.239**	**0.36**
HAM A score	Duration Of Alcohol	**0.200**	**0.44**
BDI score	Duration Of Dependence	**0.384**	**0.24**
BDI score	Age at First Drink	**0.406**	**0.26**
BDI score	Duration Of Alcohol	**0.557**	**0.08**

INDEPENDENT SAMPLES T-TEST

TABLE 12: INDEPENDENT SAMPLES T-TEST BETWEEN THE TWO GROUPS BASED ON FAMILY TYPE: NUCLEAR OR JOINT, DOES NOT SHOW ANY SIGNIFICANT DIFFERENCE FOR GENERALISED ANXIETY, DURATION OF ALCOHOL USE, AGE AT FIRST DRINK, AND BDI SCORES.

INDEPENDENT SAMPLES TEST										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
HAM A e										
	Equal variances			1.184	13.552	.257	3.0152	2.5466	-2.4637	8.4940

TABLE 13: INDEPENDENT SAMPLES T-TEST BETWEEN THE TWO GROUPS BASED ON FAMILY TYPE: NUCLEAR OR JOINT, DOES NOT SHOW ANY SIGNIFICANT DIFFERENCE FOR GENERALISED ANXIETY, DURATION OF ALCOHOL USE, AGE AT FIRST DRINK, AND BDI SCORES.

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	F	Sig.
Duration Of Alcohol	Equal variances not assumed			-.921	147.610	.359	-1.0446	1.1344	-3.2865	1.1972

The independent samples t-test does not show any statistically significant difference between nuclear and joint family.

TABLE 14

Age at First Drink	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	F	Sig.
	Equal variances not assumed			-.812	147.995	.418	-.6304	.7765	-2.1648	.9040
BDI score										
	Equal variances not assumed			-.326	8.992	.752	-.3571	1.0950	-2.8345	2.1202

The independent samples t-test does not show any statistically significant difference between nuclear and joint family.

INDEPENDENT SAMPLES T-TEST

TABLE 15

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Duration Of Alcohol								
	Equal variances	-.759	14.926	.460	-1.4234	1.8760	-5.4238	2.5770
Age at First Drink								
	Equal variances	-.882	13.817	.393	-1.3633	1.5456	-4.6825	1.9559

Independent samples t-test between the two groups based on residence: Urban or rural, does not show any significant difference for duration of alcohol use, age at first drink, and BDI scores.

TABLE 16:

BDI score	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	F	Sig.
	Equal variances not assumed			-1.088	6.025	.318	-.9444	.8678	-3.0658	1.1769

independent samples t-test between the two groups based on residence: urban or rural, does not show any significant difference for and BDI scores.

Patterns of prevalence of SAD, GAD and Depression among patients with ALCOHOL DEPENDENCE

TABLE 17: COMORBIDITY OF ANXIETY DISORDER

	Frequency	%
ALCOHOL DEPENDENCE with anxiety disorder	28	18.7
ALCOHOL DEPENDENCE without anxiety disorder	122	81.3

The comorbidity of anxiety disorders (SAD and/or GAD) in the ALCOHOL DEPENDENCE (Alcohol use disorder) N=150

TABLE 18:COMORBIDITY OF ANXIETY DISORDER

(SAD AND/OR GAD)

	Frequency	**%**
ALCOHOL DEPENDENCE with SAD	12	8
ALCOHOL DEPENDENCE with GAD	17	11.3
ALCOHOL DEPENDENCE with both SAD/GAD	1	0.7

The above table shows that ALCOHOL DEPENDENCE with GAD is 11.3%.

TABLE19: ALCOHOL DEPENDENCE WITH ANXIETY-DEPRESSION CO-MORBIDITY

	Frequency	%
ALCOHOL DEPENDENCE without anxiety disorder and Depression	109	72.7%
ALCOHOL DEPENDENCE with anxiety and depression	41	27.3%

ALCOHOL DEPENDENCE with anxiety and depression is at 27.3%.

COMPARISON OF SOCIODEMOGRAPHIC CHARACTERISTICS OF PEOPLE WITH CO MORBIDITY OF ANXIETY-DEPRESSION

TABLE20:AGE DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Age			Frequency	Percent
Without comorbidity		20-25	7	6.4
		26-30	24	22.0
		31-35	23	21.1
		36-40	26	23.9
		41-45	14	12.8
		46-50	15	13.8
		Total	109	100.0
With comorbidity		20-25	5	12.2
		26-30	13	31.7
		31-35	10	24.4
		36-40	3	7.3
		41-45	7	17.1
		46-50	3	7.3
		Total	41	100.0

TABLE21: EDUCATION DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Education			Frequency	Percent
Without comorbidity		Illiterate	14	12.8
		Primary School	29	26.6
		Middle school	32	29.4
		High school	30	27.5
		Undergraduate	3	2.8
		Postgraduate	1	.9
		Total	109	100.0
With comorbidity		Illiterate	3	7.3
		Primary School	6	14.6
		Middle school	20	48.8
		High school	11	26.8
		Undergraduate	1	2.4
		Total	41	100.0

TABLE 22: RELIGION DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Religion			Frequency	Percent
Without comorbidity		Hindu	91	83.5
		Christian	8	7.3
		Muslim	10	9.2
		Total	109	100.0
With comorbidity		Hindu	36	87.8
		Muslim	5	12.2
		Total	41	100.0

DIAGRAM 10: RELIGION DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

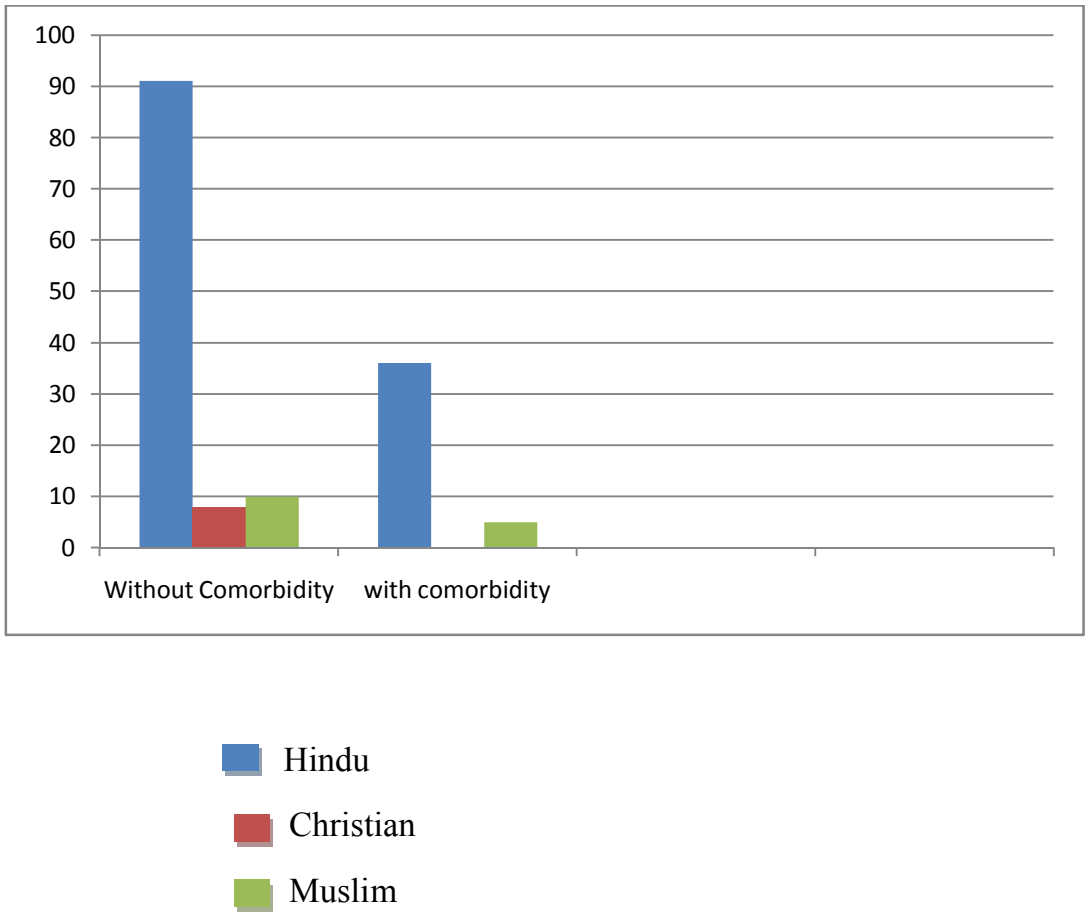

TABLE 23: FAMILY DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Family			Frequency	Percent
Without comorbidity		Nuclear	52	47.7
		Joint	57	52.3
		Total	109	100.0
With comorbidity		Nuclear	18	43.9
		Joint	23	56.1
		Total	41	100.0

DIAGRAM 11: FAMILY DISTRIBUTION OF PEOPLE WITHOUT COMORBIDITY

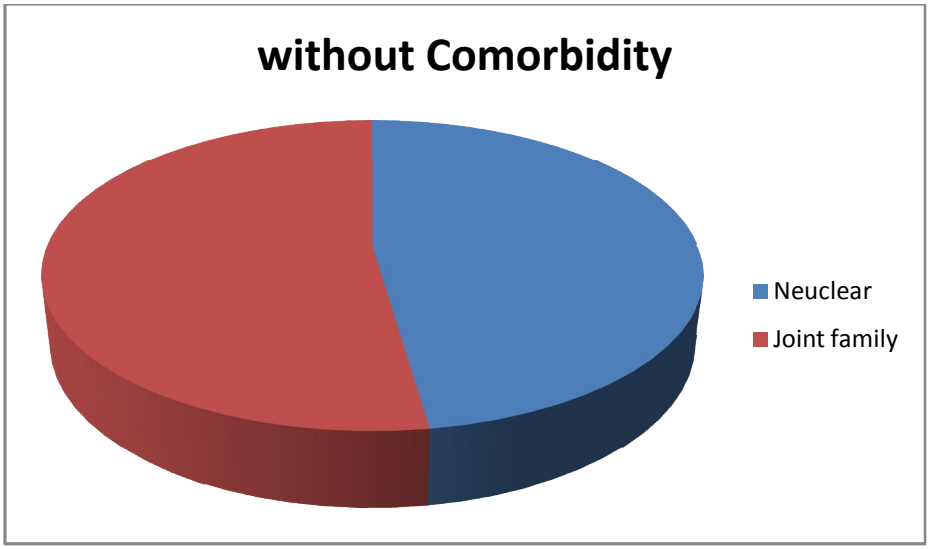

DIAGRAM 12: FAMILY DISTRIBUTION OF PEOPLE WITH COMORBIDITY

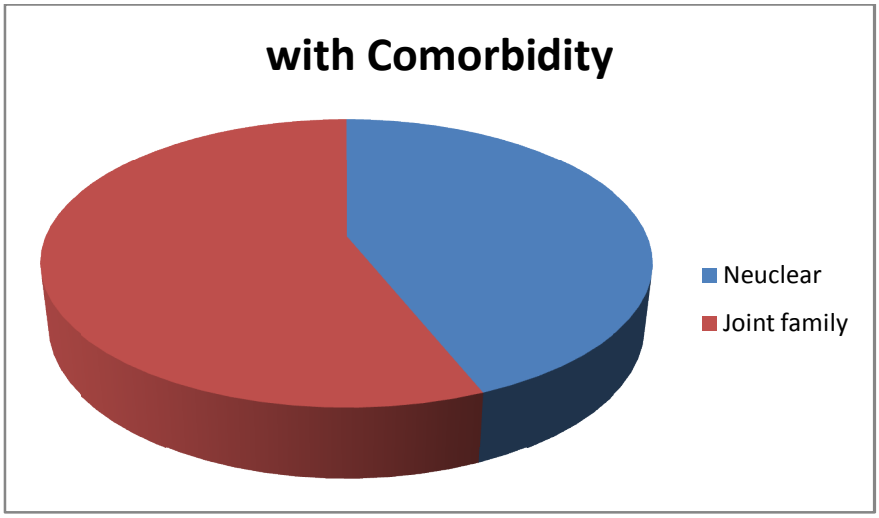

TABLE 24: SOCIOECONOMIC STATUS DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

SES			Frequency	Percent
Without comorbidity		Lower	81	74.3
		Middle	27	24.8
		Upper	1	.9
		Total	109	100.0
With comorbidity		Lower	29	70.7
		Middle	12	29.3
		Total	41	100.0

TABLE 25: INCOME DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Income			Frequency	Percent
Without comorbidity		<5000	81	74.3
		5000-10000	27	24.8
		>10000	1	.9
		Total	109	100.0
With comorbidity		<5000	29	70.7
		5000-10000	12	29.3
		Total	41	100.0

TABLE 26: MARITAL STATUS DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Marital Status			Frequency	Percent
Without comorbidity		Married	87	79.8
		Unmarried	21	19.3
		Married-separated	1	.9
		Total	109	100.0
With comorbidity		Married	30	73.2
		Unmarried	11	26.8
		Total	41	100.0

DIAGRAM 13: MARITAL STATUS DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

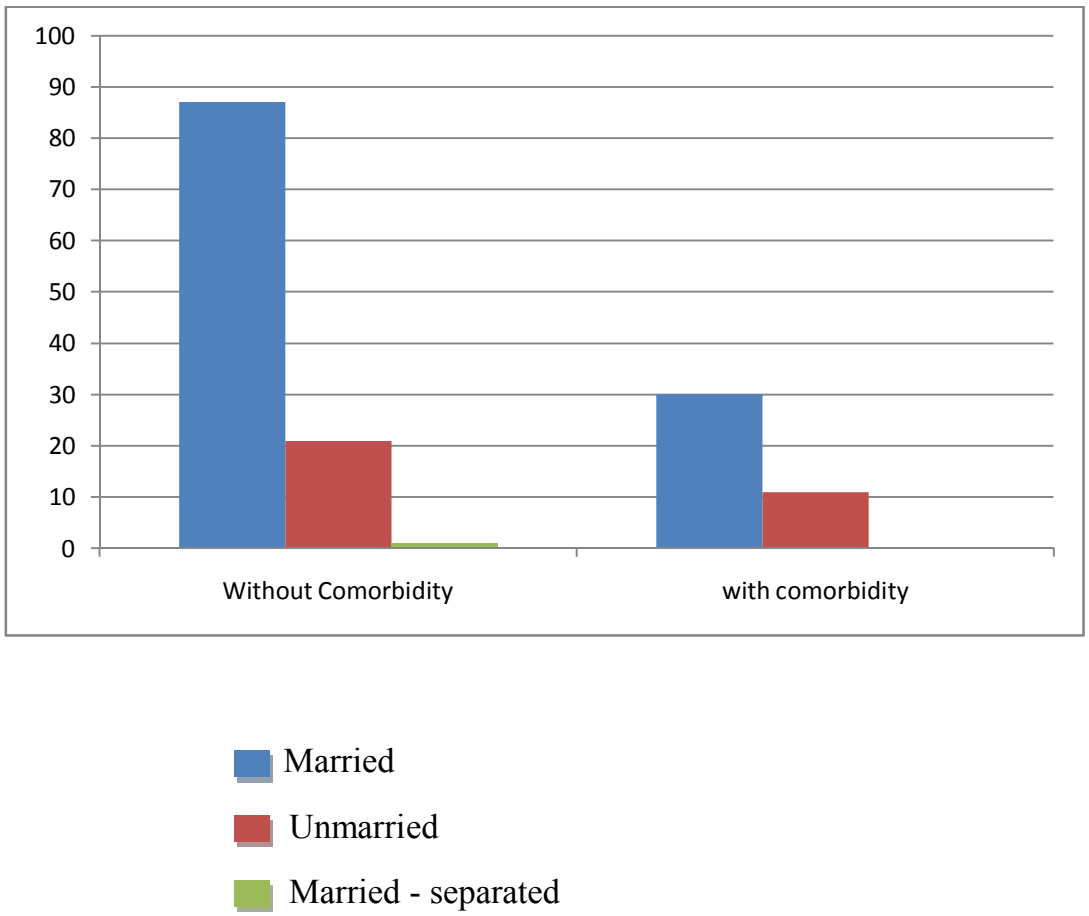

TABLE 27: OCCUPATION DISTRIBUTION OF PEOPLE WITHOUT COMORBIDITY

Occupation			Frequency	Percent
Without comorbidity		Unemployed	2	1.8
		Unskilled worker	8	7.3
		Semi-skilled worker	68	62.4
		Skilled worker	25	22.9
		Farmer	1	.9
		Clerical	1	.9
		Shop-owner	3	2.8
		Professional	1	.9
		Total	109	100.0

The person without comorbidity – Semi–skilled worker comes around 62.4% and skilled worker comes around 22.9

TABLE 28: OCCUPATION DISTRIBUTION OF PEOPLE WITH COMORBIDITY

Occupation			Frequency	Percent
With comorbidity		Unskilled worker	3	7.3
		Semi-skilled worker	25	61.0
		Skilled worker	7	17.1
		Farmer	1	2.4
		Clerical	2	4.9
		Shop-owner	3	7.3
		Total	41	100.0

The person with comorbidity – Semi–skilled worker comes around 61.0% and skilled worker comes around 17.1

TABLE 29: RESIDENCE DISTRIBUTION OF PEOPLE WITH AND WITHOUT COMORBIDITY

Residence			Frequency	Percent
With comorbidity		Urban	100	91.7
		Rural	9	8.3
		Total	109	100.0
With comorbidity		Urban	37	90.2
		Rural	4	9.8
		Total	41	100.0

DISCUSSION

DISCUSSION

The focus of this study is to study the co morbidity of social anxiety disorder, generalised anxiety disorder and depression in persons with alcohol use disorder reporting to the tertiary care center. The current study estimated the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence, compared the prevalence of generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence, assessed the correlation between generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence and studied the socio demographic and clinical variables related to generalized anxiety disorder, social anxiety disorders and depression in individuals with alcohol dependence.

The participants were above the age of 20 years. Twenty-five percent of the respondents were between the age of 26 to 30 years. Table 1 illustrates the distribution of age across different groups. A majority of the participants were Hindus (84.7%) [Diagram 1], studied middle school (34.7%) [Table 2], earning income less than 5000 rupees per month (73.3%) [Table 3], married (78%) [Table 4], semiskilled workers (62%) [Table 5], urban (91%) [Diagram 2], and 53.3% of them coming from joint families [Diagram 3].

The present study reveals GAD=11.3% and SAD=8.0%, which is in comparable to the NCS study which has a GAD=11.6% and SAD=18.4%[lvii].

This similarity proves the co-morbidity between anxiety disorders and alcohol use disorders. It is observed in studies that 15% of people getting treatment for alcoholism show the co occurrence of co morbid disorders of anxiety and alcoholism. Generalized anxiety disorder (GAD) is reported commonly in private practice among the common population with a prevalence of 1.6% to 5.0% in the general population while 2.8% to 8.5% of the patients reporting to the clinic show GAD. This high prevalence of GAD of 11.6% in this study can be attributed to the high concentration of the cases in the tertiary care centre and also bias in the recruitment of the participants.

In 2008, Kushner et al found in their systematic review that 75% of the people with co morbid disorders develop anxiety disorders[lviii]. A study by Grant BF et al in 2005 among 43093 samples in the US addressed the prevalence, correlates, co-morbidity and disability of DSM-IV generalized anxiety disorder (GAD) and other psychiatric disorders in a large national survey of the general population, the National Institute on Alcohol Abuse and Alcoholism's (NIAAA) National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) showed a lifetime prevalence of GAD at 4.1% and 12-month prevalence at 2.1% with no difference in comorbidity than other Axis I and Axis II disorders[lix]. GAD was much higher in people with substance use disorders. They concluded that GAD individually contributes to disability and impairment. Our study shows that people with both anxiety and depression is only one while people with both socialized

anxiety and generalized anxiety is 18.7% while people with either anxiety or depression is 27.3%.

In the light of the above mentioned statistics, the problematic use of alcohol remains a challenge due to various reasons; it is spearheaded by the inaction on the part of the consumer to seek help in the early stages of the disease. This is compounded by the underestimation of the problem. The beneficial outcome is clearly skewed shown by the abstinence of around 50% at the follow up of 6 to 12 months[lx]. Following treatment, it is depicted statistically that 90% of them have at least one episode of relapse in the 4-year follow up[lxi]. It may be hypothesized that these effects are partly or largely due to the cumulative effect of the co-morbidity of other disorders that has a telling impact on alcoholism and its treatment[lxii]. Studies show that alcoholism treatment is poor in people with co morbid anxiety disorders[lxiii]. There is an increased risk of relapse in alcoholics in people with severe trait anxiety that is present even after 3 weeks of abstinence, concurrent disorders of depression or anxiety or a combination of these[lxiv].

Understanding the potential effects of co-morbid anxiety disorders in patients suffering from problematic alcohol use, it becomes an indicator of risk of relapse against a group of patients without these co-morbid conditions.

CONCLUSIONS

CONCLUSIONS

The co-morbidity of ALCOHOL DEPENDENCE and SAD/GAD is high in the study population.The results of people with ALCOHOL DEPENDENCE with and without co-morbidity are significant as people with these co morbidity tend to relapse. The present study reveals GAD=11.3% and SAD=8.0%, which is comparable to the NCS study which has a GAD=11.6% and SAD=18.4%.

The relationship between anxiety and duration of alcohol use is significant. The participants were above the age of 20 years. A majority of the participants were Hindus (84.7%), studied middle school (34.7%), earning income less than 5000 rupees per month (73.3%), married (78%), semiskilled workers (62%) , urban (91%), and 53.3% of them coming from joint families .

LIMITATIONS

LIMITATIONS

1) Only a small number of samples (150 patients) participated in this study.
2) The study was done at a single point of time, which prevents episodic nature of depression and anxiety symptom evaluation.
3) Being a cross sectional study, it has limitations in generalizing the results
4) This study was conducted in a tertiary care hospital where most of the patients had severe symptoms and hence the findings of this study cannot be generalized.
5) Since this study was done in a single site, the generalizability of the results are limited.
6) The presence of the study among the urban population limits our understanding of the prevalence of co-morbidity of depression and anxiety in ALCOHOL DEPENDENCE in rural population.

FUTURE RECOMMENDATIONS

FUTURE RECOMMENDATIONS

1) It is suggested that patients with alcohol dependence should be screened for depression and anxiety
2) More studies are required to find the strength of association between these co-morbid conditions and alcohol dependence.
3) Anxiety management and depression treatment should increase the treatment outcome in alcohol dependence.

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ANNEXURES

தகவல் படிவம்

குடிபோதை சார்ந்த (ஆல்கஹால் டிபென்டன்ஸி) நோயாளிகளில், பொது பதட்ட நோய் (ஜென்ரலைஸ்டு ஆன்சைட்டி டிஸ்ஆர்டர்) சமூக பதட்ட நோய் (சோஸியல் ஆன்சைட்டி டிஸ்ஆர்டர்) மற்றும் மன அழுத்த (டிப்பரசன்) நோயின் அறிகுறிகள் பாதிப்பை பற்றிய பகுப்பாய்வு

தகவல்:

ஆராய்ச்சியின் நோக்கமும், பயன்களும் :

குடிபோதை சார்ந்த நோயாளிகளுக்கு உடல் ரீதியாகவும், மனரீதியாக பல்வேறு பாதிப்புகள் உண்டாகிறது. அதில் பதட்ட நோய்களும், மன அழுத்த அறிகுறிகளும் குறிப்பிடதக்க பாதிப்பை நோயாளிகளுக்கு ஏற்படுத்த கூடியவை. இந்நோய்களில் அறிகுறிகளை இனம் கண்டு அவைகளை குணப்படுத்தினால் தான் நோயாளிகளை முழுமையாக குடிபோதையிலிருந்து மீள முடியும். இந்த ஆய்வின் நோக்கம் குடிபோதை சார்ந்த (ஆல்கஹால் டிபென்டான்ஸி) நோயாளிகளில் பொதுபதட்டநோய் (ஜெனரலைஸ்டு ஆன்சைட்டி டிஸ்ஆர்டர்) சமூக பதட்ட நோய் (சோஸியல் ஆன்சைட்டி டிஸ்ஆர்டர்) மற்றும் மன அழுத்த (டிப்பரசன்) நோயின் அறிகுறிகளின் பாதிப்பை பற்றி பகுப்பாய்வதாகும்.

ஆய்வு நடைமுறைகள் :

குடிபோதை சார்ந்த (ஆல்கஹால் டிபென்டான்ஸ்) நோயாளிகள் 20 வய்து முதல் 50 வயது வரை உள்ளவர்கள், இந்த ஆய்வில் சேர்த்து கொள்ளப்படுவர்.

அந்தரங்க தன்மை :

உங்கள் / உங்கள் மனைவி / கணவரின் மருத்துவப் பதிவேடுகள் மிகவும் அந்தரங்கமாக வைத்துக் கொள்ளப்படும் மற்றும் இன்ன பிற மருத்துவர்கள் / விஞ்ஞானிகள் / இந்த ஆய்வின் தனிக்கையாளர்கள் அல்லது ஆராய்ச்சி ஆதரவாளர்களின் பிரதிநிதிகள் ஆகியோரிடமும் அவை வெளிப்படுத்தப்படும். இந்த ஆய்வின் முடிவுகள் அறிவியல் பத்திரிக்கைகளில் பிரசுரிக்கப்படலாம். ஆனால் பெயரை வெளியிடுவதன் மூலம் நோயாளியின் அடையாளம் காட்டப்பட மாட்டார்கள்.

ஆய்வில் உங்கள் பங்கேற்பு மற்றும் உங்கள் உரிமைகள் :

இந்த ஆய்வில் உங்கள் / உங்கள் உறவினரின் பங்கேற்பு முழுவதும் உங்களுடைய விருப்பத்தைச் சார்ந்தது. இதில் நீங்கள் பங்கேற்கவோ, மறுக்கவோ, பாதியில் வெளியேறிடவோ அல்லது குறிப்பிட்ட கேள்விகளுக்கு பதிலளிக்க மறுக்கவோ உங்களுக்கு முழு உரிமை உண்டு எப்படி இருந்தாலும் உங்கள்/ உங்கள் உறவினரின் உடல்நிலைக்கேற்ப, உங்களுக்கு/உங்கள் உறவினருக்கு பொருத்தமான சிகிச்சை தொடர்ந்து அளிக்கப்படும். தாங்கள் இது குறித்து வேறு விபரங்கள் தெரிந்து கொள்ள விரும்பினால், எங்களிடம் கேட்டுக் தெரிந்து கொள்ளலாம்

மேலும் விபரங்கள் அறிய கீழ்க்கண்ட நபரை அணுகவும் :

மரு.சு.மணிகண்டன் 9840129610

தனியாகப் பிரித்தெடுத்து, ஆய்வில் பங்கேற்பவரிடம் தரப்பட வேண்டும்)

சுய ஒப்புதல் படிவம்

ஆய்வின் பெயர் : குடிபோதை சார்ந்த (ஆல்கஹால் டிபென்டன்எஸ்) நோயாளிகளில், பொதுபதட்ட நோய் (ஜென்ரலைஸ்டு ஆன்சைட்டி டிஸ்ஆர்டர்) சமூக பதட்ட நோய் (சோஸியல் ஆன்சைட்டி டிஸ்ஆர்டர்) மற்றும் மன அழுத்த (டிப்பரசன்) நோயின் அறிகுறிகள் பாதிப்பை பற்றிய பகுப்பாய்வு

ஆராய்ச்சி நிலையம் : மனநலப்புறநோயாளிகள் பிரிவு
அரசு ஸ்டான்லி மருத்துவமனை
சென்னை - 600 001.

பங்கு பெறுபவரின் பெயர் :

பங்கு பெறுபவரின் எண் :

நோயாளி இதனை (✓) குறிக்கவும் :

மேலே குறிப்பிட்டுள்ள மருத்துவ ஆய்வின் விவரங்கள் எனக்கு விளக்கப்பட்டது. என்னுடைய சந்தேகங்களை கேட்கவும், அதற்கான தகுந்த விளக்கங்களை பெறவும் வாய்ப்பளிக்கப்பட்டது. ☐

நான் / என் உறவினர் இவ்வாய்வில் தன்னிச்சையாகதான் பங்கேற்கிறேன். எந்த காரணத்தினாலும் எந்த கட்டத்திலும் எந்த சட்ட சிக்கலுக்கும் உட்படாமல் நான்/ என் உறவினர் இவ்வாயில் இருந்து விலக்கிக் கொள்ளலாம் என்று அறிந்து கொண்டேன். ☐

இந்த ஆய்வு சம்பந்தமாகவும் இதை சார்ந்த ஆய்வு மேற்கொள்ளும் போதும் இந்த ஆய்வில் பங்குபெறும் மருத்துவர் என்னுடைய மருத்துவ அறிக்கைகளை பார்ப்பதற்கு என் அனுமதி தேவையில்லை என அறிந்து கொள்கிறேன். நான்/ என் உறவினர் ஆய்வில் இருந்து விலகிக் கொண்டாலும் இது பொருந்தும் என அறிகிறேன். ☐

இந்த ஆய்வின் மூலம் கிடைக்கும் தகவல்களையும், பரிசோதனை முடிவுகளையும் மற்றும் சிகிச்சை தொடர்பான தகவல்களையும் மருத்துவர் மேற்கொள்ளும் ஆய்வில் பயன்படுத்திக் கொள்ளவும் அதை பிரசுரிக்கவும் / பதிப்பிக்கவும் என் முழு மனதுடன் சம்மதிக்கிறேன். ☐

இந்த ஆய்வில் பங்கு கொள்ள ஒப்புக் கொள்கிறேன். எனக்கு கொடுக்கப்படும் அறிவுரைகளின்படி நடத்து கொள்வதுடன் இந்த ஆய்வை மேற்கொள்ளும் மருத்துவ அணிக்கு உண்மையுடன் இருப்பேன் என்றும் உறுதி அளிக்கிறேன். என் உடல் நலம் பாதிக்கப்பட்டாலோ அல்லது எதிர்பாராத வழக்கத்திற்கு மாறான நோய்க்குறி தென்பட்டாலோ உடனே அதனை மருத்துவ அணிக்கு தெரிவிப்பேன் என உறுதி அளிக்கிறேன். ☐

நோயாளி/பங்கேற்பவரின் கையொப்பம் ..... இடம் ..... தேதி .....

கட்டை விரல் ரேகை

பங்கேற்பவரின் காப்பாளரின் கையொப்பம் ..... இடம் ..... தேதி .....

கட்டை விரல் ரேகை

பங்கேற்பவரின் பெயர் மற்றும் விலாசம்

.....

.....

ஆய்வாளரின் கையொப்பம் ..... இடம் ..... தேதி .....

ஆய்வாளரின் பெயர் .....

நோயாளியின் பெயர் ..... பாலினம் : ஆண்..... பெண்.....

வயது ..... ஆண்டுகள் அல்லது பிறந்த தேதி .....

நோயாளியை தொடர்பு கொள்ளும் முகவரி .....

.....

நோயாளியின் தொலைபேசி எண்.

நோயாளியின் உறவினர் பெயர் .....

		பங்கேற்பவரின் கையொப்பம்/பெருவிரல் பதிப்பு
1	மேலே குறிப்பிடப்பட்டுள்ள மருத்துவ ஆய்வின் ..... தேதியிட்ட நோயாளிகளுக்கான செய்தி நான் படித்திருக்கிறேன் மற்றும் புரிந்திருக்கிறேன்/ விவரிக்கப்பட்டுள்ளேன். கேள்விகள் கேட்கவும் அனுமதி வழங்கப்பட்டுள்ளேன் என நான் உறுதி செய்கிறேன்.	
2	இந்த ஆய்வில் பங்கேற்பது என்/என் உறவினரின் சொந்த விருப்பப்படியே என நான் அறிந்திருக்கிறேன். மேலும் என்/என் உறவினரின் மருத்துவ சிகிச்சை கவனிப்பு அல்லது சட்டபூர்வ உரிமைகளுக்கு பாதிப்பு ஏற்படாமல் நான் எந்த நேரத்திலும் விலகிக் கொள்ளலாம் என்பதை அறிந்திருக்கிறேன்.	
3	எத்திக்ஸ் கம்மிட்டி மற்றும் ரெகுலேட்டரி அத்தாரிட்டீஸ்-க்கும் நான் இந்த ஆய்விலிருந்து விலகினாலும் தற்போதைய மற்றும் எதிர்கால இந்த ஆய்வு சார்ந்த என்/என் உறவினர் உடல்நல குறிப்புகளை என் அனுமதியின்றி பார்க்க முடியும் என நான் அறிகிறேன். நான் / என் உறவினர் ஆய்வில் இருந்து விலகிக் கொண்டாலும் இது பொருந்தும் என அறிகிறேன்.	
4	இந்த ஆய்வின் மூலம் கிடைக்கப்பெறும் குறிப்புகளையும் தகவல்களையும் மற்றும் பரிசோதனை முடிவுகளையும், உபயோகப்படுத்த தடை செய்ய மாட்டேன் என சம்மதிக்கிறேன். அதனால் அவைகள் விஞ்ஞானம், ஆராய்ச்சிக் கட்டுரைகள் போன்ற சம்மந்தப்பட்டவைகளுக்கு பயன் உள்ளதாக இருக்க வேண்டும். இக்குறிப்புகள், அதன் விளக்கங்கள், ஆய்வுக் கட்டுரைகள் ஆகியவற்றை பிரசுரிக்கவும்/ பதிப்பிக்கவும் என் முழு மனதுடன் சம்மதிக்கிறேன்.	
5	மேற்கூறிய ஆய்வில் என் சுய விருப்பத்தின்படி பங்கு கொள்ள நான் சம்மதிக்கிறேன்.	

ஆய்வில் பங்கேற்பவர் / சட்டபூர்வமாக ஏற்கப்பட்ட நபர் கையொப்பம் அல்லது பெருவிரல் பதிவு

PROFORMA

DEMOGRAPHIC FACTORS

Name:

Age:1) 20 – 25, 2) 26 -30, 3) 31 – 35, 4) 36 – 40, 5) 41 – 45, 6) 46 – 50

Sex:1) Male / 2) Female

Education:1) Illiterate / 2) Primary School / 3) Middle School / 4)High School / 5) Under graduate / 6) Postgraduate/ 7) Professional.

Religion: 1) Hindu 2) Christian 3) Muslim 4) Others

Family: 1) Nuclear 2) Joint Family.

Socio-Economic Status: 1) Lower SES 2)Middle SES 3) Upper SES

Income: 1) Rs. = <5000, 2) 5000 – 10000, 3) > 10000

Marital Status = 1) Married 2) Unmarried 3) Married-Separated 4) Widowed.

Occupation:1) Unemployed/ 2) Unskilled Worker / 3) Semi-skilled worker/ 4) Skilled worker/farmer, 5) Clerical, shop-owner/ 6) Semi-profession/ 7) Profession.

Residence:1) Urban / 2) Rural.

Hamilton Anxiety Rating Scale (HAM-A)

Reference: **Hamilton M. The assessment of anxiety states by rating. Br J Med Psychol 1959; 32:50–55.**

Rating Clinician-rated

Administration time 10–15 minutes

Main purpose To assess the severity of symptoms of anxiety

Population Adults, adolescents and children

Commentary

The HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms, and is still widely used today in both clinical and research settings. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Although the HAM-A remains widely used as an outcome measure in clinical trials, it has been criticized for its sometimes poor ability to discriminate between anxiolytic and antidepressant effects, and somatic anxiety versus somatic side effects. The HAM-A does not provide any standardized probe questions. Despite this, the reported levels of inter-rater reliability for the scale appear to be acceptable.

Scoring

Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe.

Versions

The scale has been translated into: Cantonese for China, French and Spanish. An IVR version of the scale is available from Healthcare Technology Systems.

Additional references

Maier W, Buller R, Philipp M, Heuser I. The Hamilton Anxiety Scale: reliability, validity and sensitivity to change in anxiety and depressive disorders. J Affect Disord 1988;14(1):61–8.

Borkovec T and Costello E. Efficacy of applied relaxation and cognitive behavioral therapy in the treatment of generalized anxiety disorder. J Clin Consult Psychol 1993; 61(4):611–19

Address for correspondence

The HAM-A is in the public domain.

Hamilton Anxiety Rating Scale (HAM-A)

Below is a list of phrases that describe certain feeling that people have. Rate the patients by finding the answer which best describes the extent to which he/she has these conditions. Select one of the five responses for each of the fourteen questions.

0 = Not present, 1 = Mild, 2 = Moderate, 3 = Severe, 4 = Very severe.

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1 Anxious mood [0] [1] [2] [3] [4]

Worries, anticipation of the worst, fearful anticipation, irritability.

2 Tension [0] [1] [2] [3] [4]

Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax.

3 Fears [0] [1] [2] [3] [4]

Of dark, of strangers, of being left alone, of animals, of traffic, of crowds.

4 Insomnia [0] [1] [2] [3] [4]

Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares, night terrors.

5 Intellectual [0] [1] [2] [3] [4]

Difficulty in concentration, poor memory.

6 Depressed mood [0] [1] [2] [3] [4]

Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing.

7 Somatic (muscular) [0] [1] [2] [3] [4]

Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone.

8 Somatic (sensory) [0] [1] [2] [3] [4]

Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, pricking sensation.

9 Cardiovascular symptoms [0] [1] [2] [3] [4]

Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting feelings, missing beat.

10 Respiratory symptoms [0] [1] [2] [3] [4]

Pressure or constriction in chest, choking feelings, sighing, dyspnea.

11 Gastrointestinal symptoms [0] [1] [2] [3] [4]

Difficulty in swallowing, wind abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation.

12 Genitourinary symptoms [0] [1] [2] [3] [4]

Frequency of micturition, urgency of micturition, amenorrhea, menorrhagia, development of frigidity, premature ejaculation, loss of libido, impotence.

13 Autonomic symptoms [0] [1] [2] [3] [4]

Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair.

14 Behavior at interview [0] [1] [2] [3] [4]

Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing, etc.

Liebowitz Social Anxiety Scale

Liebowitz MR. Social Phobia. Mod Probl Pharmacopsychiatry1987;22:141-173

Pt Name:	Pt ID#:		
Date:		Clinic #:	Assessmentpoint:
		FearorAnxiety: 0 =None 1 =Mild 2 =Moderate 3 =Severe	Avoidance: 0 = Never(0%) 1 = Occasionally(1—33%) 2 = Often(33—67%) 3 = Usually(67—100%)

	Fear or Anxiety	Avoidance	
1. Telephoning in public.(P)			1.
2. Participating in small groups.(P)			2.
3. Eating in public places.(P)			3.
4. Drinking with others in public places.(P)			4.
5. Talking to people in authority.(S)			5.
6. Acting, performing or giving a talk in front of an audience.(P)			6.
7. Going to a party.(S)			7.
8. Working while being observed.(P)			8.
9. Writing while being observed.(P)			9.
10. Calling someone you don't know very well.(S)			10.
11. Talking with people you don't know very well.(S)			11.
12. Meeting strangers.(S)			12.
13. Urinating in a public bathroom.(P)			13.
14. Entering a room when others are already seated.(P)			14.
15. Being the center of attention. (S)			*15.*
16. Speaking up at a meeting.(P)			16.
17. Taking a test.(P)			17.
18. Expressing a disagreement or disapproval to people you don't know very well.(S)			18.
19. Looking at people you don't know very well in the eyes.(S)			19.
20. Giving a report to a group.(P)			20.
21. Trying to pick up someone.(P)			21.
22. Returning goods to a store.(S)			22.
23. Giving a party.(S)			23.
24. Resisting a high pressure salesperson.(S)			24.

Beck's Depression Inventory

This depression inventory can be self-scored. The scoring scale is at the end of the questionnaire

1.

0	I do not feel sad.
1	I feel sad
2	I am sad all the time and I can't snap out of it.
3	I am so sad and unhappy that I can't stand it.

2.

0	I am not particularly discouraged about the future.
1	I feel discouraged about the future.
2	I feel I have nothing to look forward to.
3	I feel the future is hopeless and that things cannot improve.

3.

0	I do not feel like a failure.
1	I feel I have failed more than the average person.
2	As I look back on my life, all I can see is a lot of failures.
3	I feel I am a complete failure as a person.

4.

0	I get as much satisfaction out of things as I used to.
1	I don't enjoy things the way I used to.
2	I don't get real satisfaction out of anything anymore.
3	I am dissatisfied or bored with everything.

5.

0	I don't feel particularly guilty
1	I feel guilty a good part of the time.
2	I feel quite guilty most of the time.
3	I feel guilty all of the time.

6.

0	I don't feel I am being punished.
1	I feel I may be punished.
2	I expect to be punished.
3	I feel I am being punished.

7.

0	I don't feel disappointed in myself.
1	I am disappointed in myself.
2	I am disgusted with myself.
3	I hate myself.

8.

0	I don't feel I am any worse than anybody else.
1	I am critical of myself for my weaknesses or mistakes.
2	I blame myself all the time for my faults.
3	I blame myself for everything bad that happens.

9.

0	I don't have any thoughts of killing myself.
1	I have thoughts of killing myself, but I would not carry them out.
2	I would like to kill myself.
3	I would kill myself if I had the chance.

10.

0	I don't cry any more than usual.
1	I cry more now than I used to.
2	I cry all the time now.
3	I used to be able to cry, but now I can't cry even though I want to.

11.

0 I am no more irritated by things than I ever was.
1 I am slightly more irritated now than usual.
2 I am quite annoyed or irritated a good deal of the time.
3 I feel irritated all the time.

12.

0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13.

0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions more than I used to.
3 I can't make decisions at all anymore.

14.

0 I don't feel that I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel there are permanent changes in my appearance that make me look unattractive
3 I believe that I look ugly.

15.

0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16.

0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17.

0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18.

0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19.

0 I haven't lost much weight, if any, lately.
1 I have lost more than five pounds.
2 I have lost more than ten pounds.
3 I have lost more than fifteen pounds.

20.

0 I am no more worried about my health than usual.

1 I am worried about physical problems like aches, pains, upset stomach, or constipation.

2 I am very worried about physical problems and it's hard to think of much else.

3 I am so worried about my physical problems that I cannot think of anything else.

21.

0 I have not noticed any recent change in my interest in sex.

1 I am less interested in sex than I used to be.

2 I have almost no interest in sex.

3 I have lost interest in sex completely.

INTERPRETING THE BECK DEPRESSION INVENTORY

Now that you have completed the questionnaire, add up the score for each of the twenty-one questions by counting the number to the right of each question you marked. The highest possible total for the whole test would be sixty-three. This would mean you circled number three on all twenty-one questions. Since the lowest possible score for each question is zero, the lowest possible score for the test would be zero. This would mean you circles zero on each question. You can evaluate your depression according to the Table below.

Total Score_____Levels of Depression

1-10_____These ups and downs are considered normal
11-16_____ Mild mood disturbance
17-20_____Borderline clinical depression
21-30_____Moderate depression
31-40_____Severe depression
over 40_____Extreme depression

A PERSISTENT SCORE OF 17 OR ABOVE INDICATES THAT YOU MAY NEED MEDICAL TREATMENT. IF YOU HAVE ANY CARDIAC CONCERNS, PLEASE CONTACT CARDIOVASCULAR INTERVENTIONS, P.A. at 407-894-4880

BDI TAMIL VERSION

A.	0	நான் கவலையுடன் இருக்கவில்லை.
	1.	நான் கவலையுடன் இருக்கிறேன்.
	2.	நான் எப்போதும் கவலையுடன் இருக்கிறேன். அதிலிருந்து மீள முடியவில்லை.
	3.	நான் கவலையுடன் இருப்பதை என்னால் தாங்கிக் கொள்ள முடியவில்லை.
B.	0	வருங்காலத்தைப் பற்றி நல்லபடியாக இருக்கமென நினைக்கிறேன்.
	1a.	எதிர் காலத்தைப் பற்றி மிகவும் கவலையாக இருக்கிறேன்.
	2.	நான் எப்போதும் கவலையுடன் இருக்கிறேன். அதிலிருந்து மீள முடியவில்லை.
	3.	நான் கவலையுடன் இருப்பதை என்னால் தாங்கிக் கொள்ள முடியவில்லை.
C.	0	நான் தோல்வியடைந்ததாக உணரவில்லை
	1.	நான் ஒரு சாதாரணமான மனிதனை விட அதிகமாக தோல்வியடைந்துள்ளேன்.
	2a.	நன்மையானவை எனக்கு ஓரளவே கிடைத்துள்ளது.
	3.	நான் முற்றிலும் தோல்வியடைந்த மனிதனாக நினைக்கிறேன் (பெற்றோர், கணவன், மனைவி என்ற முறையில்)
D.	0	நான் குறிப்பிடத் தகுந்த முறையில் திருப்தியற்றவனாக இல்லை
	1a.	பெரும்பாலும் எல்லா நேரங்களிலும் எனக்கு அலுப்பு தட்டியுள்ளது.
	1b.	இதற்கு முன்பு எவ்வாறு சந்தோஷமான அனுபவித்துக் கொண்டிருந்தேனோ அது மாதிரி இப்போது இருக்கமுடியவில்லை.
	2.	எந்த ஒரு பொருளிலோ, நிகழ்ச்சியிலோ நான் திருப்தியடைய முடியவில்லை.
	3.	எல்லாவற்றிலும் திருப்தி இல்லாதவனாக இருக்கிறேன்.
E.	0	நான் உபயோகமில்லாதவனாக உணரவில்லை
	1.	றுபரும்பாலான நேரம் நான் மோம், உதவாக்கரை என்று உணர்கிறேன்.
	2a.	நான் மிகவும் குற்ற உணர்வுடனிருக்கிறேன்.
	2b.	எல்லா நேரத்திலம் யாருக்கும் உபயோகமில்லாத மனிதனாக உணர்கிறேன்.
	3.	நான் மிகவும் கெட்டவனாகவோ அல்லது எதற்கும் உபயோகமில்லாதவனாகவோ உணர்கிறேன்.

F.	0	நான் தண்டிக்கப்படுவதாக நினைக்கவில்லை.
	1.	ஏதேனும் கெடுதுல் செய்யும்படி எனக்கு ஏற்படக்கூடும் என்று உணர்கிறேன்.
	2.	எனக்கு நிச்சயம் தண்டனை கிடைக்கும்
	3a.	நான் தண்டனை பெறத் தகுதியுடையவாக நினைக்கிறேன்.
	3b.	எனக்கு தண்டனை கிடைக்க விரும்புகிறேன்.
G.	0	என்னிடத்ததில் எனக்கு ஏமாற்றமில்லை
	1a.	நான் ஏமாற்றடைந்திருக்கிறேன்.
	1b.	நான் என்னையே விரும்பவில்லை
	2.	நான் என்னையே வெறுக்கிறேன்.
	2b.	நான் என்னைப் பற்றியே நினைக்கிறேன்
H.	0	மற்ற எவரையும் விட நான் மோசமானவன் என்று நினைக்கவில்லை.
	1a.	நான் என்னுடைய தவறுகளுக்காக என்னையே கடுமையாக விமர்ச்சித்துக் கொள்பவன்
	2b.	தவறாக நடக்கும் எல்லா காரியங்களுக்கும் நானே காரணம் என நினைக்கிறேன்.
I.	0	என்னை நானே துன்புறுத்திக் கொள்ள நினைக்கவில்லை
	1.	என்னை நானே துன்புறுத்திக் கொள்ள நினைக்கிறேன். ஆனால் அதை நிறைவேற்றிக் கொள்ளமுடியவில்லை.
	2.	நான் தற்கொலை செய்து கொள்ள வேண்டிய திட்டங்களுடன் இருக்கிறேன்.
	2a.	நான் என்னையே வெறுக்கிறேன்.
	3.	என்னால் முடியுமானால் என்னை நானே கொலை செய்து கொள்வேன்.
J	0	சாதாரணமாக நான் அழுவது கிடையாது
	1.	இதற்கு முன்பு உள்ளதை விட இப்போது அதிகம் அழுகிறேன்.
	2.	இப்போது எல்லா நேரங்களிலும் அழுகிறேன். என்னால் நிறுத்த முடியவில்லை.
	3.	இப்போதெல்லாம் நான் அழவேண்டுமென்று விரும்பினால் கூட அழமுடியவில்லை.
K	0	இப்போது நான் இதற்கு முன்பு உள்ளதை விட எரிச்சல் படுவது கிடையாது.
	1.	இப்போதெல்லாம் எனக்கு எளிதாக எரிச்சல் ஏற்பட்டு விடுகிறது.
	2.	எல்லா வேளைகளிலும் எனக்கு எரிச்சல் உண்டாகிறது.
	3	எனக்கு எரிச்சல் மூட்டக் கூடிய காரியங்கள் நடந்தால் கூட இப்போது எனக்கு எரிச்சல் ஏற்படாமல் போய்விடுகிறது.

L	0	மற்றவர்களிடம் எனக்கு உள்ள ஈடுபாடு ஒன்றும் குறையவில்லை.
	1.	இதற்கு முன்பு இருந்தமாதிரி மற்றவர்களின் மேல் எனக்கு உள்ள ஈடுபாடு சிறிது குறைந்த காணப்படுகிறது.
	2.	மற்றவர்களின் மேல் உள்ள எனது விருப்பம் பெரும்பாலும் குறைந்துள்ளது.
	3.	மற்றவர்களின் மேல் உள்ள எனது விருப்பம் முழுவதுமாகக் குறைந்து அவர்களைப் பற்றிய அக்கறை ஏதும் எனக்கு கிடையாது.
M	0	எப்போதும் போல் ஒரு காரியத்தைப் பற்றி நல்லபடியாகத் தீர்மானிக்க முடிகிறது.
	1.	ஏதாவது காரியங்களில் முடிவு எடுப்பதை நான் நிறுத்தி வைத்துக் கொள்கிறேன். ஏனெனில் என் மீதே எனக்கு நம்பிக்கை இல்லை.
	2.	மற்றவர்கள் உதவி இல்லாமல் எந்த ஒரு காரியத்தை தீர்மானிக்க முடியவில்லை.
	3.	இப்போது எந்தக் காரியத்தைப் பற்றியும் முடிவு எடுக்கவே முடியவில்லை.
N	0	இதற்கு முன்பு இருந்ததை விடப் பார்ப்பதற்கு நான் மோசமாக இல்லை.
	1.	நான் வயதானவரைப் போன்று காட்சியளிப்பதாகவோ, அல்லது கவர்ச்சியற்று காணப்படுவதாகவோ நினைத்து மிகவும் கவலையடைந்துள்ளேன்.
	2.	என்னுடைய உடல் தோற்றத்தில் நிரந்தரமான மாற்றங்கள் ஏற்பட்டு நான் பார்ப்பதற்கு கவர்ச்சியற்றவனாகக் காணப்படுவதாக உணர்கிறேன்.
	3.	நான் அவலட்சணமாக தோற்றமளிப்பதாக உணர்கிறேன்.
O	0	முன்பு காரியங்களைச் செய்ய முடிந்த மாதிரியே இப்போது செய்கிறேன்.
	1a.	ஏதாவது வேலை செய்ய ஆரம்பிக்க அதிகப்படியான முயற்சி தேவைப்படுகிறது.
	1b.	முன்பு வேலை செய்தது போன்று இப்போது வேலை செய்ய முடிவதில்லை.
	2.	ஏதாவது ஒரு வேலையைச் செய்ய என்னை மிகவும் வருத்திக் கொள்ள வேண்டியுள்ளது.
	3.	எந்த வேலையும் என்னால் செய்ய முடிவதில்லை.
P	0	எப்போதும் போல் என்னால் நன்றாக தூக்க முடிகிறது.
	1.	இதற்கு முன்பு உள்ளதை விட இப்போது காலையில் எழுந்திருக்கும் போது மிகவும் களைப்பாக உள்ளது.
	2.	வழக்கத்திற்கு மாறாக ஒன்று அல்லது இரண்டு மணி நேரம் முன்பாக படுக்கையிலிருந்து விழித்துக் கொள்கிறேன். பிறகு நூங்க முடிவதில்லை.
	3.	ஒவ்வொரு நாளும் காலையில் சீக்கிரம் எழுந்து விடுகிறேன். ஐந்து மணி நேரத்திற்கு மேல் தூக்க முடிவதில்லை.

Q	0	சாதாரணமானது அல்லாமல் அதிகமாக எனக்கு களைப்பு என்பது ஏற்படுவதில்லை.
	1.	வழக்கத்திற்கு மாறாக எனக்கு இப்போது அதிகமான களைப்பு ஏற்படுகிறது.
	2.	எந்த ஒரு காரியமும் செய்யும் போது எனக்கு களைப்பு ஏற்படுகிறது.
	3.	எந்த ஒரு காரியமும் செய்வதற்கு மிகுந்த களைப்பு ஏற்படுகிறது.
R	0	எனக்கு வழக்கம் போலவே பசி எடுப்பது மோசமாக இல்லை.
	1.	சாதாரணமாக இருப்பது போல் எனக்கு பசி எடுப்பது அவ்வளவு நன்றாக இல்லை.
	2.	இப்பேது எனக்கு பசி எடுப்பது மிகவும் மோசமாக உள்ளது.
	3.	எனக்கு எப்போதும் பசியே எடுப்பதில்லை.
S	0	சமீப காலத்தில் என்னுடைய உடல் எடையில் குறைவு ஏற்பட்டதில்லை.
	1.	என்னுடைய எடையில் 5 பவுண்டுக்கு மேல் குறைந்துள்ளது.
	2.	என்னுடைய எடையில் 10 பவுண்டுகள் மேல் குறைந்துள்ளது.
	3.	என்னுஐடய எடையில் 15 நவுண்டுக்கு மேல் குறைந்துள்ளது.
T	0	வழக்கத்திற்கு மாறாக நான் என்னுஐடய உடல் நலனைப் பற்றி அக்கறை கொண்டதில்லை.
	1.	உடம்பில் ஏற்படுபவன போன்ற உபாதைகளுக்காக அல்லது வயிற்றில் ஏற்படும் கோளாறு அல்லது மலச்சிகல் அல்லது மற்றுமுள்ள உடலில் ஏற்படும் விருப்பத்தகாத உணர்வுகளுக்காக என்று கவலைப்பட்டிருக்கிறேன்.
	2.	நான் எவ்வாறு உணர்கிறேன் அல்லது எனைப்பற்றி உணர்கிறேன் என்பதை நினைக்க கடினமாக உள்ளதைப் பற்றியும் அக்கறை கொண்டுள்ளேன்.
	3.	நான் எப்படி உணர்கிறேன் என்பதிலேயே முழுவதுமாக ஊன்றி விடுகிறேன்.
U	0	பால் உறவு சம்பந்தமாக உற்ள ஆர்வத்தில் என்னிடத்தில் சமீபத்தில் மாற்றம் ஏதும் ஏற்பட்டதாக எனக்கு தெரியவில்லை
	1.	இதற்கு முன்பு இருந்ததை விட இப்போது எனக்கு பால் உறவு சம்பந்தமாக சிறிது ஆர்வம் குறைந்துள்ளது.
	2.	இப்போது எனக்கு பால் உறவு சம்பந்தமானவற்றில் ஆர்வம் மிகவும் குறைவாக உள்ளது.
	3.	எனக்கு பால் உறவு சம்பந்தமானவற்றில் முற்றிலும் ஆர்வம் குறைந்துள்ளது.

MASTER CHART

Sno	Age	Sex	Education	Religion	Family	SES	Income	Marital Status	Occupation	Residence	Age at First Drink	Duration Of Alcohol	Duration Of Dependence	HAM-A	HAMA score	Libowitz SAD	BDI	BDI score
1	2	1	2	1	2	1	1	2	4	1	15	13	3					
2	6	1	4	1	2	1	1	1	5	2	30	16	10					
3	4	1	4	1	1	1	1	1	3	1	25	15	10					
4	5	1	3	1	2	1	1	2	4	1	29	14	7					
5	3	1	1	1	2	2	2	1	4	1	25	7	2					
6	2	1	3	1	2	1	1	2	3	1	19	8	4	1	14			
7	4	1	4	1	1	1	1	1	2	1	22	15	3					
8	3	1	3	3	2	2	2	1	3	2	25	8	3					
9	3	1	3	1	1	1	1	1	3	1	20	12	5	2	18			
10	6	1	3	3	2	2	2	1	3	1	23	25	20				2	23
11	4	1	2	1	1	2	2	1	4	1	14	25	5					
12	1	1	4	1	1	1	1	1	3	1	14	10	3					
13	1	1	3	3	2	1	1	2	3	1	17	6	1					
14	2	1	4	1	1	1	1	1	3	1	22	6	3	1	17			
15	2	1	3	1	2	1	1	2	3	2	18	8	4			2		
16	5	1	2	3	2	2	2	1	4	1	22	20	5					
17	2	1	4	1	2	1	1	2	4	1	16	12	1					
18	3	1	2	1	1	1	1	1	4	1	17	14	3			2		
19	3	1	4	1	1	2	2	1	4	1	24	8	3					
20	4	1	2	1	2	1	1	1	3	1	17	23	10					
21	4	1	3	1	1	1	1	1	3	1	30	10	8					
22	5	1	2	1	2	1	1	1	3	1	15	30	3					

23	2	1	4	1	1	1	1	1	4	1	15	15	8					
24	4	1	2	1	2	2	2	1	4	1	30	10	3					
25	2	1	4	1	2	1	1	1	3	1	18	12	10					
26	3	1	4	1	2	2	2	1	4	1	21	10	5	2	19			
27	2	1	2	1	1	1	1	1	3	1	20	10	3	2	23			
28	5	1	1	1	2	1	1	1	2	1	17	18	8				1	18
29	3	1	2	1	1	1	1	1	3	1	15	20	10					
30	2	1	4	1	2	1	1	1	3	1	15	13	6					
31	2	1	3	1	2	1	1	2	3	1	22	5	2				1	18
32	2	1	1	1	2	1	1	2	3	1	14	12	8					
33	2	1	4	1	2	1	1	2	1	1	25	3	2					
34	2	1	2	1	1	1	1	1	2	1	24	6	2					
35	6	1	3	1	2	2	2	1	4	1	42	7	1					
36	5	1	3	1	2	1	1	1	3	1	25	17	5					
37	2	1	3	1	1	1	1	1	3	1	24	3	2					
38	3	1	2	1	1	1	1	1	3	1	13	18	10					
39	4	1	4	1	2	2	2	1	3	2	25	13	4					
40	2	1	3	1	1	1	1	1	3	1	23	4	1					
41	2	1	4	1	1	1	1	1	3	1	20	6	1	1	16			
42	2	1	3	1	2	1	1	2	3	1	19	10	4			2		
43	4	1	1	3	2	1	1	1	3	1	23	15	10					
44	4	1	2	1	2	1	1	1	3	1	20	20	3					
45	3	1	3	1	1	1	1	1	3	1	20	14	3				1	19
46	5	1	1	1	2	1	1	1	3	1	18	27	10					
47	3	1	4	1	1	1	1	1	3	1	18	15	6	2	19			
48	2	1	2	1	1	2	2	1	4	1	15	15	5					
49	3	1	1	1	1	1	1	1	3	1	33	2	1					

50	6	1	4	1	2	1	1	1	1	1	28	20	3					
51	3	1	2	1	1	1	1	1	2	1	18	16	4					
52	6	1	1	1	2	1	1	1	3	2	18	29	7					
53	5	1	2	1	2	1	1	1	3	1	20	25	20					
54	3	1	2	3	2	1	1	1	3	1	20	14	4					
55	3	1	1	1	1	1	1	1	2	1	25	8	3					
56	5	1	3	3	1	1	1	1	3	1	29	12	4					
57	3	1	1	1	1	2	2	1	4	1	22	10	3					
58	1	1	3	1	2	1	1	2	3	1	20	5	2					
59	6	1	3	1	2	1	1	1	3	1	26	20	3					
60	6	1	1	1	2	1	1	1	3	1	23	25	20					
61	2	1	2	1	1	1	1	1	3	1	19	8	3					
62	4	1	3	1	1	1	1	1	3	1	24	13	5				1	19
63	3	1	2	1	1	1	1	1	3	1	18	15	5					
64	1	1	3	1	2	1	1	2	3	1	16	8	2	2	19			
65	5	1	2	1	2	2	2	1	4	1	23	20	3					
66	5	1	2	1	1	1	1	1	3	1	22	20	5					
67	1	1	3	2	2	1	1	2	3	1	17	3	1					
68	2	1	2	1	2	1	1	1	3	1	15	12	6					
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72	6	1	2	1	2	1	1	1	3	1	25	21	5					
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74	5	1	3	1	1	1	1	1	3	1	20	22	1					
75	4	1	3	1	1	2	2	1	4	1	26	14	5					
76	4	1	4	1	2	1	1	2	3	1	29	11	3					

77	3	1	4	1	1	2	2	1	4	1	26	6	2					
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81	4	1	6	1	2	2	2	1	4	1	21	17	3					
82	6	1	1	1	2	1	1	1	2	2	28	16	4					
83	2	1	3	1	2	1	1	2	3	1	24	6	2					
84	5	1	4	1	1	2	2	1	4	1	25	20	5					
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87	6	1	2	3	2	2	2	1	7	1	17	30	8					
88	6	1	3	1	1	1	1	1	3	1	16	30	7					
89	2	1	4	1	1	1	1	1	3	1	17	11	6					
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93	3	1	5	1	1	2	2	1	4	1	27	4	1					
94	2	1	3	3	2	2	2	2	4	1	19	9	3	1	15			
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96	5	1	3	1	2	1	1	1	3	1	27	17	5					
97	3	1	3	1	1	1	1	1	3	2	27	8	2				1	20
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123	2	1	4	1	2	2	2	2	6	1	19	7	2					
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129	4	1	2	1	1	1	1	1	3	1	20	20	5					
130	4	1	1	3	2	1	1	1	2	1	28	10	3	2	24			

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135	6	1	3	1	1	1	1	1	3	1	23	15	4					
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